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### KODULAR CREATOR FOR BEGINNER



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### **Preface**

Thanks be to Allah S.WT because with his abundant grace this book was able to be completed within the set time period. This book is an introduction to mobile-based development applications. This book helps non-IT individuals to build simple applications.

Kodular is a user-friendly drag-and-drop mobile app development platform designed for creating Android applications without the need for coding. It provides an intuitive interface where users can design app layouts by simply dragging and dropping various components.

With its visual programming environment, users can create app functionalities by connecting blocks, eliminating the need for writing code manually.

The authors hopes you enjoy learning block programming. We welcome with an open heart any constructive views and comments on this book.

May God bless you.

## **Table of**Contents



01	About Kodular	Page
	- Introduction	1
	- History	1
	- Features	2
	- Summary	7
02	Working With Kodular	Page
	- General Step	8
	- Preparing the screen	12
	- Preparing the Layout	19
	- Preparing the Block	50
	- Preparing the Database	62
	- Preparing Setting Login	
	Utilities	65
	- Preparing the Storage	78

## **Table of**Contents



03	Successfully Built	Page
	- Main Interface	88
	<ul> <li>Interface for Login</li> </ul>	89
	- Interface for Register	90
	- Interface for Welcome	
	Page	91



### Introduction

**Kodular** is a popular drag-and-drop mobile app development platform that allows users to create Android applications without needing to write code. It provides a user-friendly interface where developers, even those without extensive programming knowledge, can design and build fully functional apps.

### **History**

**Kodular** was founded by Arun Saigal, Sander Jochems, and Mika Niinimäki in 2017. It was initially inspired by MIT App Inventor, an educational tool for creating Android applications. The founders aimed to enhance the functionalities and ease of use of App Inventor, leading to the creation of Kodular.



### **Features**

### Drag-and-Drop Interface

Kodular offers an intuitive drag-and-drop interface, allowing users to design app layouts and functionality by simply dragging components onto the screen.

### Wide Range of Components

Kodular provides a variety of components, such as buttons, labels, text boxes, sensors, multimedia, and more, which users can utilize to add functionality to their apps.



### Built-in Blocks Editor

Users can define the behavior of their app by using Kodular's blocks editor, which resembles puzzle pieces. It follows a visual programming paradigm, where users connect blocks to create logical sequences and actions.

### Extensions Support

Kodular allows developers to create and use extensions, which are additional components or functionalities not included in the default Kodular setup. This feature enables users to extend the capabilities of their apps further.



### Cloud-based Compilation

Kodular boasts an active and supportive community of developers and users. The platform provides forums where users can ask questions, share their projects, and seek assistance from fellow community members and Kodular staff.

### Multi-platform Support

While Kodular primarily focuses on Android app development, it also provides features for creating apps compatible with Android Wear OS and Android TV.



### Community and Support

Kodular offers cloud-based compilation, meaning users can compile their apps directly on Kodular's servers without needing to set up complicated development environments on their local machines.

### Monetization

Kodular supports various monetization options for apps, including displaying advertisements through AdMob integration, in-app purchases, and premium subscriptions. This allows developers to generate revenue from their apps.



### Education and Learning

Kodular is often used as an educational tool to introduce students and beginners to app development concepts. Its visual interface and simplified programming approach make it accessible to learners of all ages.

### Privacy and Security

Kodular emphasizes privacy and security in app development. It provides features to protect users' data and comply with privacy regulations, such as GDPR (General Data Protection Regulation).





### **Open Source**

While Kodular itself is not entirely open source, it supports the development and integration of open-source extensions and components.



### **Summary**

Overall, Kodular is a versatile platform that democratizes mobile app development by making it accessible to a broader audience, including beginners, educators, and experienced developers alike. Its user-friendly interface, extensive feature set, and supportive community make it a popular choice for creating Android applications without the need for traditional coding skills.

### **General Step**

### **Preparing The Screen**

- 1 Sign in or register if you are a new user
- 2 Create the new project and type the project name
- 3 Write your application name
- Write your package name
- 5 Upload the image by clicking the assets menu

## **General Step**

### **Layout**

1 User Interface Design

### **Block**

1 This block will make animation when loginButtonShowHide has been clicked

## **Create Login Screen With Animation**

This is a list of component that you will use

Vertical Scroll Arrangement as Container

Space

Image

Label

**Text Box** 

**Button** 

Animation Utilities

Connectivity Utilities

Web

Tiny DB





## **Create Login Screen With Animation**



Before continue into the tutorial, don't forget to prepare:



### End of that you must

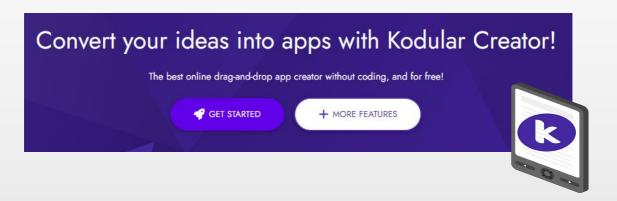




# Preparing The SCREEN



Open Kodular.io



Create Account 2

+ #	
Sign Up	
Create your Kodular Account	
Enter your name*	
Enter your email*	
Already have an account?	Next
Sign in instead	
Or sign up with	
G	<b>y</b>



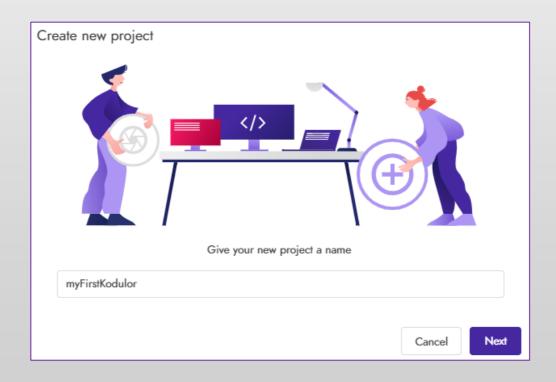
Create Project 3

Create project

Project Name

4

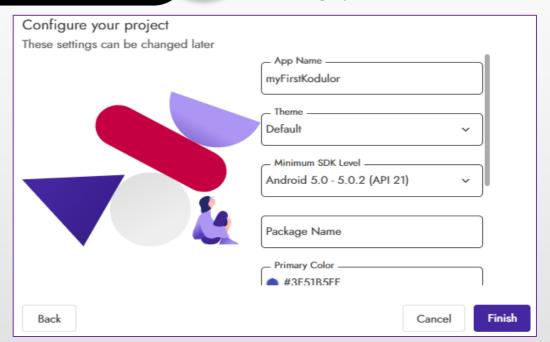
Give Project Name as myFirstKodulor, then click Next.





Create Account 5

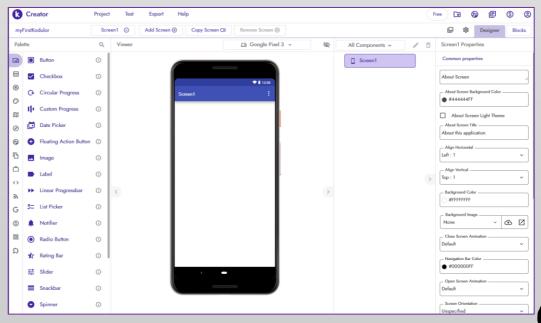
Give App Name as myFirstKodulor, then click Finish.



Workspace

6

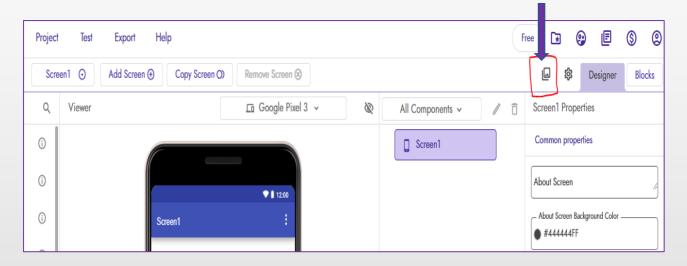
Your workspace appear! Yeay!



Upload Image 7

Upload the image to assets

Click here



**Project Name** 

8

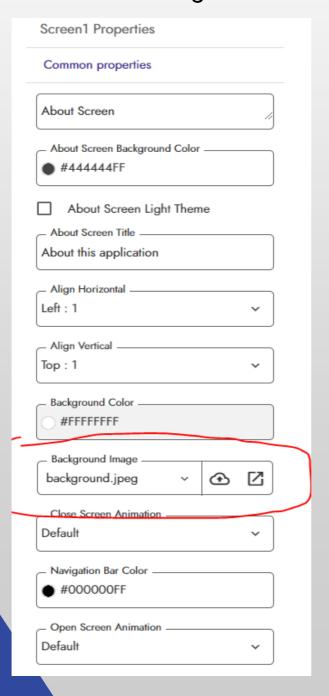
8.1 – Click the screen1 find the background image, choose the image.





Project Name 8

8.2 – Click the screen1 find the background image, choose the image.



8.3 – Click the screen1 find the background





# Preparing The LAYOUT





## Remove The Title Bar And Status Bar From Screen

Option Menu

1

In Screen1 Properties, uncheck the show options menu, show status bar and title visible. This make a full screen application

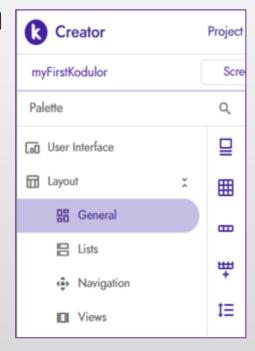
Screen1 Properties		
Scrollable Show Options Menu Show Status Bar		
TitleScreen1		
Title Bar Font Typeface  Default		
Title Bar Subtitle		
☐ Title Visible		



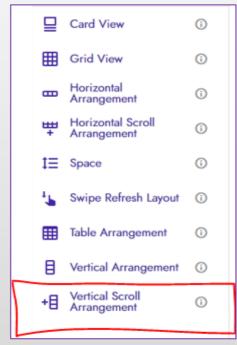
### Choose Layout 2

Choose layout palette from the left side, then choose General and drag Vertical Scroll Arrangement component into the screen.

2.1

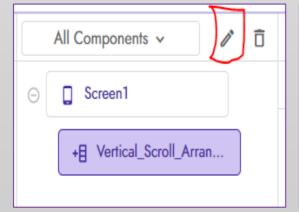


2.2



Rename the component into "logoContainer".

2.3

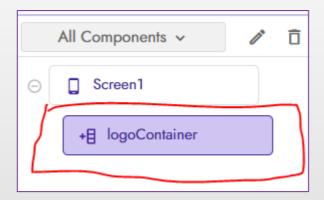






Choose Layout 2

### 2.4 Click "logoContainer".

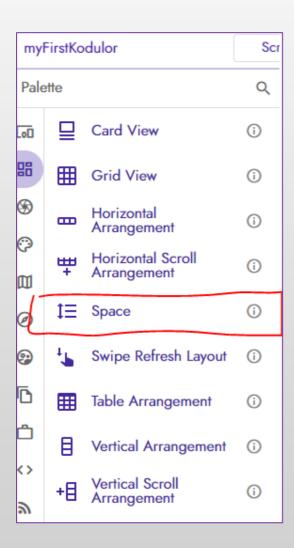


## 2.5 Change Width to Fill parent.

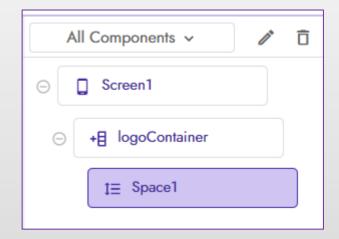
	logoContainer Properties			
	Common properties			
	_ Align Horizontal			$\overline{}$
	Left : 1			~
	_ Align Vertical			
	Top : 1 ~		~	
	Background Color			
	#0000000			
		Clickable		
	_ He	ight		
	Auto	omatic	<b>©</b>	[]
	Wi	dth		$\overline{}$
	[	parent	[6]	
L	lma	age		
	No	ne v	<b>④</b>	
	<b>~</b>	Scrollbar		
		Use Round Card		
	<b>✓</b>	Visible		
		Is Card		

Choose Layout 2

## 2.6 Drag space to logoContainer

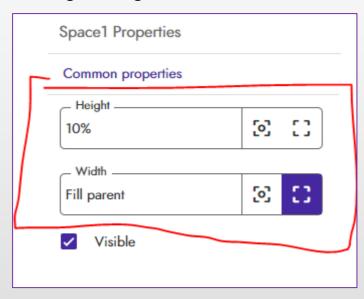


### 2.7 Click "Space1 ".



Choose Layout 2

2.8 Change Height to 10% and width to Fill parent ".

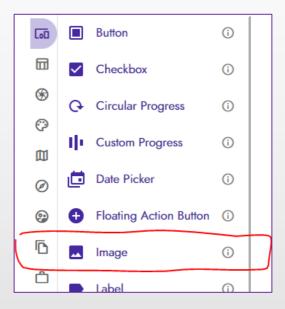


2.9 Click "User Interface".

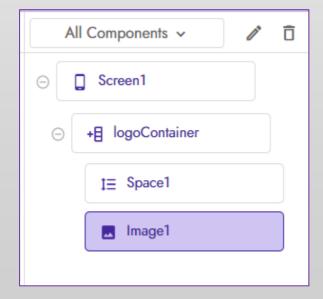


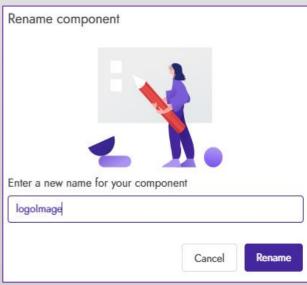
### Drag Image

3.1 Drag "**Image**" to logoContainer put it below the "Space1".



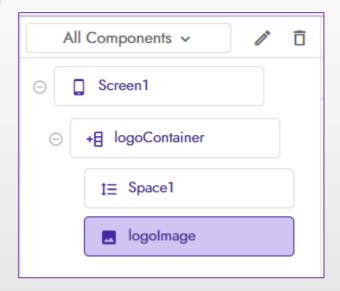
3.2 Click "Image " component then rename to logoImage.

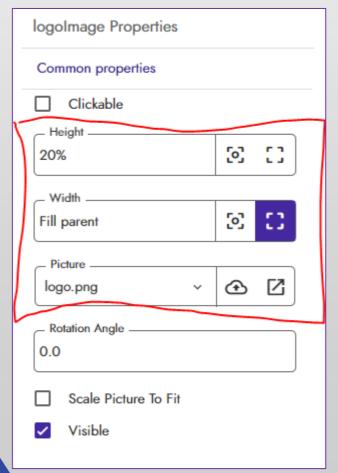




Drag Image 3

3.3 Click "logolmage".



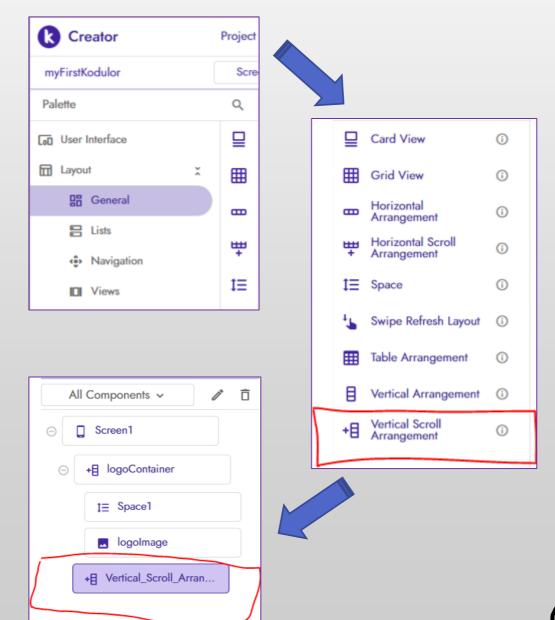


3.4 Change Height to 20%, Width to Fill parent and Choose Picture logo.png in drop down list

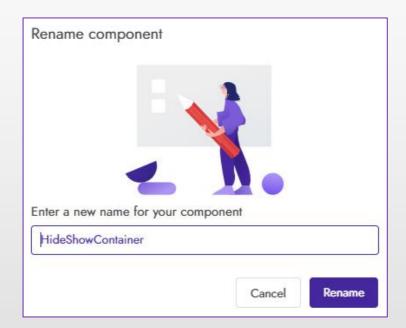


## Drag Image 3

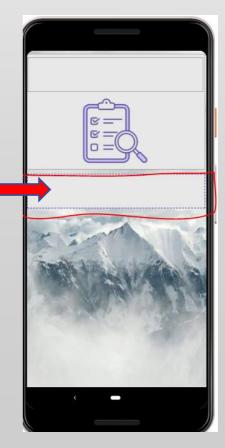
3.5 Drag a new vertical Scroll Arrangement, and put below the **logoContainer**, rename the component to "HideShowContainer"



Drag Image 3

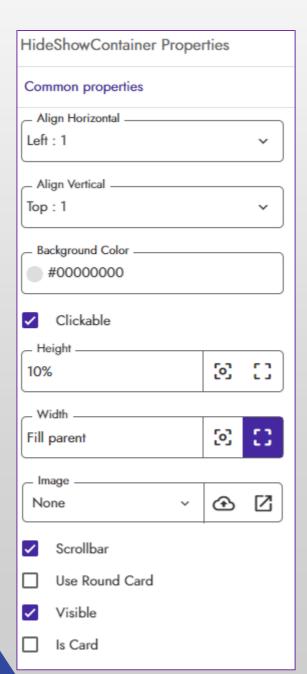


HideShowContainer



## **Drag Image**

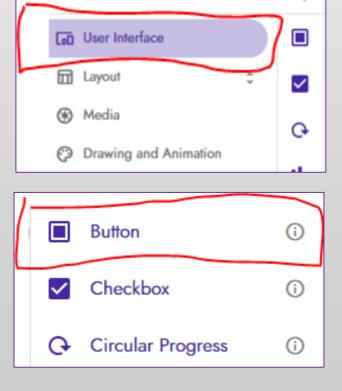
#### 3.6 Set the properties for "HideShowContainer"



3.7 Choose layout palette from the left side, then choose User Interface component and drag TWO (2) buttons to

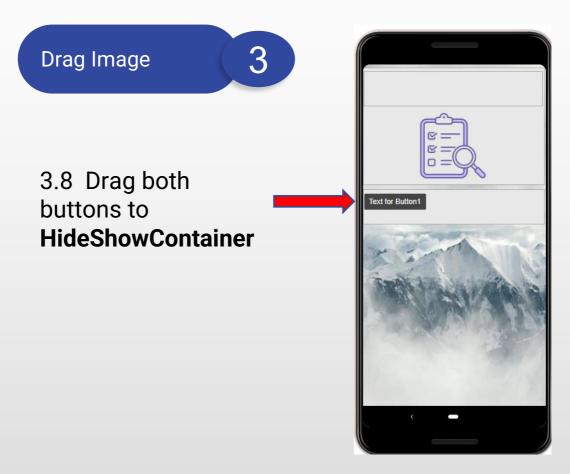
HideShowContainer.

Palette

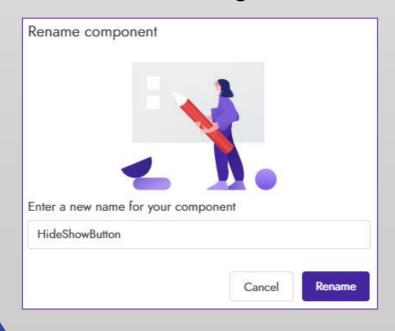




Q



3.9 Rename for both buttons to "HideShowButtonLogin" and "HideShowButtonRegister"





## Set Properties 4

4.1 Set the properties for "HideShowButtonLogin" and "HideShowButtonRegister" as in picture 4.1a and 4.1b

4.1a 4.1b

HideShowButton Properties		
Common properties		
_ Background Color		
• #673AB7FF		
✓ Enabled		
Font Bold		
Font Italic		
_ Font Size		
18.0		
Font Typeface ————————————————————————————————————		

Height
Fill parent

Width
Fill parent

Image
None

None

Shape
Rounded

Text
Login

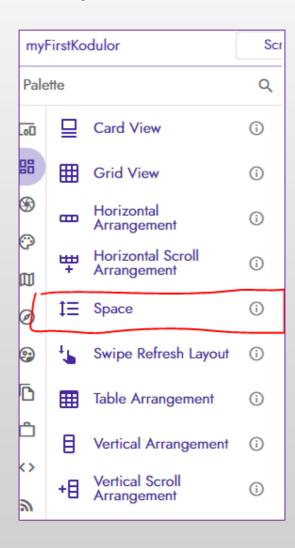
Text Alignment
Center: 1

Text Color
#FFFFFFFF

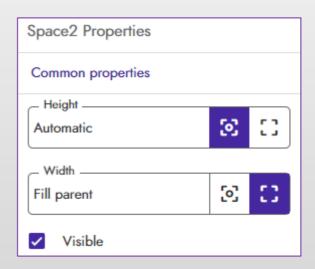
Visible

Space 5

#### 5.1a Drag space below the logoContainer



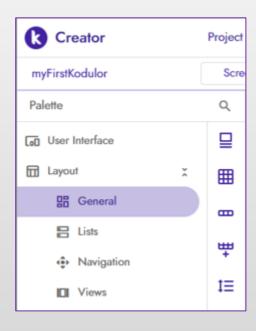
#### 5.1b Set Space Propertise.



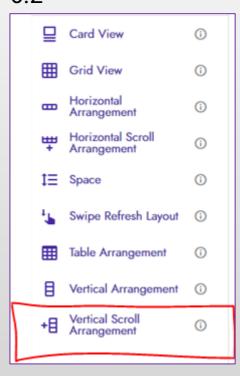
#### Layout Palette 6

Choose layout palette from the left side, then choose Vertical Scroll Arrangement component and drag into the screen below "Space2".

6.1



6.2



6.3



Rename as titleContainer



**Layout Palette** 

6

#### 6.4 Set properties for **titleContainer**

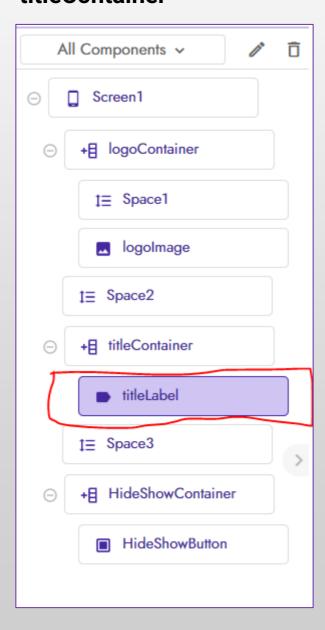
titleContainer Prope	erties		
Common properties			
_ Align Horizontal			
Left : 1			~
_ Align Vertical			
Top : 1			~
Background Color			
#0000000			
☐ Clickable			
_ Height			
20%		[6]	[]
_ Width			
Fill parent		[6]	
_ Image			
None	~	<b>①</b>	Ø
✓ Scrollbar			
Use Round Card	I		
✓ Visible			
☐ Is Card			

#### 6.5 Drag Label into **titleContainer**

	Pale	ette		Q
	[0]		Button	(i)
		<b>~</b>	Checkbox	<u>(i)</u>
	<b>(</b>	G	Circular Progress	<b>(i)</b>
	© 11	ф	Custom Progress	<b>(i)</b>
	ш Ø	Ö	Date Picker	(i)
	<u>@</u>	0	Floating Action Button	(i)
	Б		Image	<b>(i)</b>
( -	△	•	Label	(i)
_				

Layout Palette 6

#### 6.6 Rename as **titleContainer**



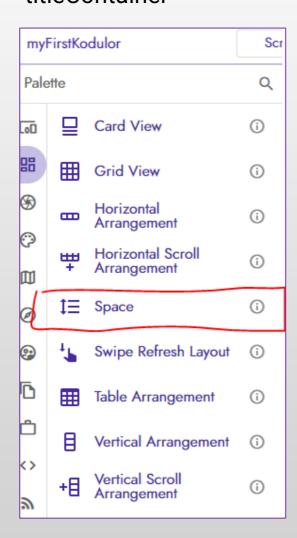
#### 6.7 Set properties for "titleLabel"

titleLabel Properties		
Common properties		
_ Background Color		
#673AB7FF		
Clickable		
✓ Font Bold		
Font Italic		
_ Font Size		
24.0		
_ Font Typeface		
Font Awesome 5 (Brands)		~
_ Height		
Automatic	<b>(2)</b>	[]
_ Width		
Fill parent	[6]	£3
_ Text		
Training Evaluation Manageme	ent Sys	tem
_ Text Alignment		
Center: 1		~
_ Text Color		
#FFFFFFFF		
✓ Visible		



#### Drag Space 7

#### 7.1 Drag space below the titleContainer



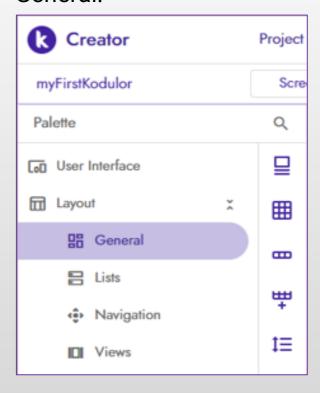
#### 7.2 Set Space Propertise.

Space3 Properties		
Common properties		
_ Height		
10%	[6]	
_ Width		
Fill parent	િ	
✓ Visible		

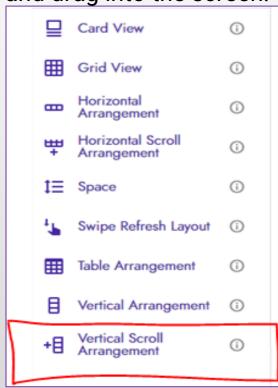
#### **Preparing Login Form**



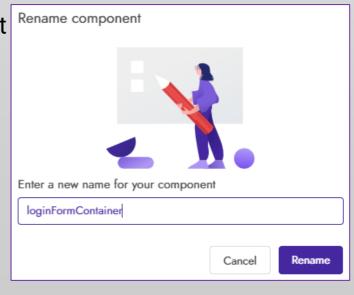
8.1 Choose layout palette from the left side, choose General.



8.2 Choose Vertical Scroll Arrangement component and drag into the screen.



8.3 Rename Vertical Scroll Arrangment component to "loginFormContainer"





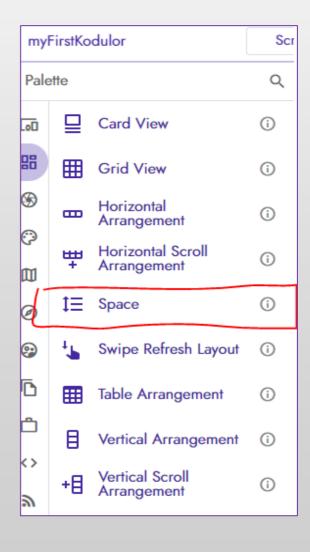
#### **Preparing Login Form**

#### Login 8

#### 8.3 Set properties "loginFormContainer"

logi	nFormContainer Proper	ties	
Con	nmon properties		
_ AI	ign Horizontal ————		$\overline{}$
Cer	nter: 3		~
_ AI	ign Vertical		
Тор	:1		~
_ Ba	ckground Color ————		
•	#673AB7FF		
	Clickable		
_ H	eight		
Fill	parent	િ	
_ w	idth		
Fill	parent	ြ	
_ Im	nage		
No	one v	<b>①</b>	
~	Scrollbar		
	Use Round Card		
~	Visible		
	Is Card		

#### 8.4 Drag space into the loginFormContainer

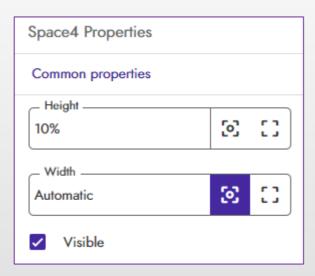




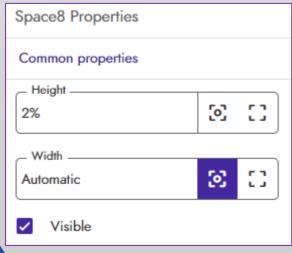
#### **Preparing Login Form**



8.5 Set Space4 Properties.



8.7 Drag Space below the Label1, then Set Space8 properties.

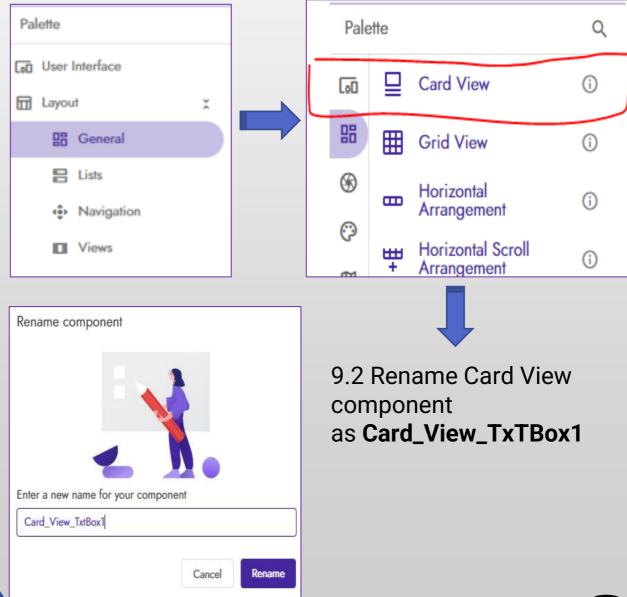


8.6 Drag Label below the Space4, then Set Label1 properties.

Label1 Properties		
Common properties		
_ Background Color		
● #673AB7FF		
Clickable		
✓ Font Bold		
Font Italic		
_ Font Size		
20.0		
_ Font Typeface		
Default		~
_ Height		
Automatic	(6)	[]
_ Width		_
Fill parent	[6]	
_ Text		
Login User Account		
Text Alignment		
Center: 1		~
_ Text Color		
#FFFFFFF		
✓ Visible		

Layout Palette 9

9.1 Choose layout palette from the left side, then choose Card View component and drag into loginFormContainer below "Space4".





**Layout Palette** 

9

9.3 Set properties to Card\_View\_TxTBox1

Card_View_TxtBox1 Prope	rties	
Common properties		
_ Align Horizontal		
Center: 3		~
_ Align Vertical		
Center : 2		~
Background Color —		
#FFFFFFF		
Content Padding Bottom		
0		
Content Padding Left		
15		
Content Padding Right		
0		
Content Padding Top		
0		
Corner Radius		
10		
Elevation —		
0		
Full Clickable		
_ Height		
8%	[6]	[]
_ Width		
300px	[6]	[]



**Layout Palette** 

10

10.1 Choose layout palette from the left side, then choose User Interface component and drag TextBox into Card\_View\_TxtBox1.

myFirstKodulor
Palette

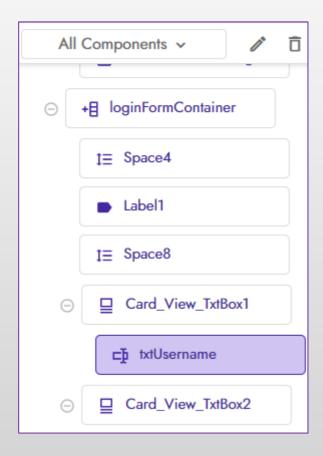
User Interface

Ē	Date Picker	(i)
•	Floating Action Button	(i)
	Image	(i)
	Label	(i)
<b>&gt;&gt;</b>	Linear Progressbar	(i)
<b>5</b> =	List Picker	(i)
•	Notifier	(i)
•	Radio Button	(i)
*	Rating Bar	(i)
群	Slider	(i)
	Snackbar	(i)
•	Spinner	(i)
¥	Spotlight	(i)
<b>//</b>	State Progress Bar	(i)
-•	Switch	(i)
₽	Text Box	(i)
ō	Time Picker	(i)



Layout Palette 10

#### 10.2 Rename TextBox to txtUsername



Layout Palette

10

#### 10.3 Setting the properties of txtUsername

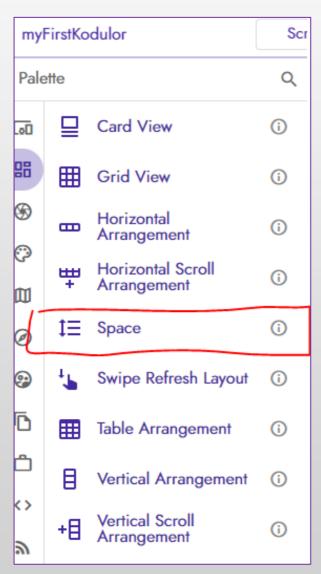
txtUsername Properties			
Common properties			
_ Background Color			
( #FFFFFFF			
✓ Enabled			
Error Text			
Font Bold			
Font Italic			
_ Font Size			
18.0			
10.0			
_ Font Typeface			
Default			
Default		~ ]	
_ Height			
Automatic	[6]	[]	
_ Width			
Fill parent	[6]	£3	
This parcin	(-)		
_ Hint			
Fill Username			
riii Osemame			
_ Hint Color			
● #00000FF			
7,0000011			
_ Input Type			
Normal: 1			
Troilliai. 1			
☐ Multiline			
Read Only			

Text			
_ Text Alignment			
Center : 1			~
_ Text Color			
• #000000FF			
✓ Visible			
Advanced properties			^
Cursor Color —			
● #000000FF			
Cursor Visible			
_ Font Typeface Import			
None	~	<b>①</b>	
_ Highlight Color			
#0000000			
_ Max Lines			
2147483647			
_ Rotation Angle			
0.0			

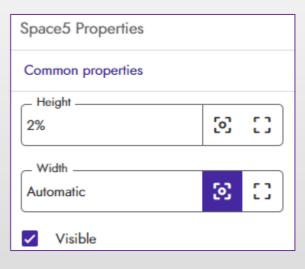


Layout Palette 11

#### 11a. Drag space below the Card\_View\_TxtBox1



11b. Set Space Properties.

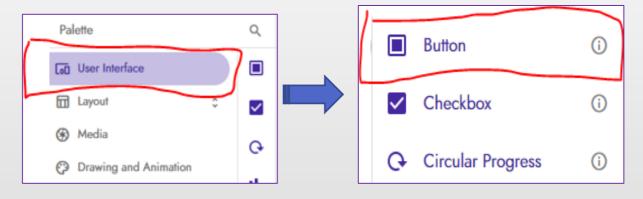


Repeat steps in slide 44 until 48. Give the Card View name as "Card\_View\_TxtBox2" and TextBox as "txtPassword".

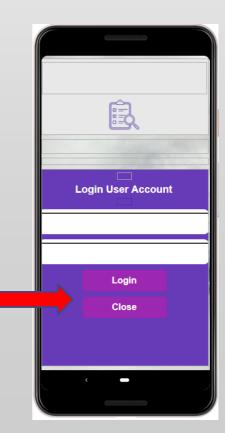


Layout Palette 12

12.1 Choose layout palette from the left side, then choose User Interface component and drag TWO(2) buttons to **loginFormContainer**.



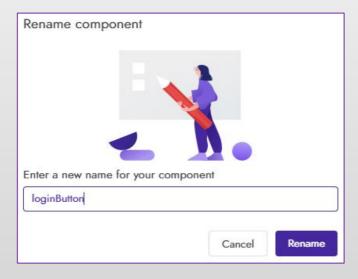
12.2 Drag both buttons to loginFormContainer



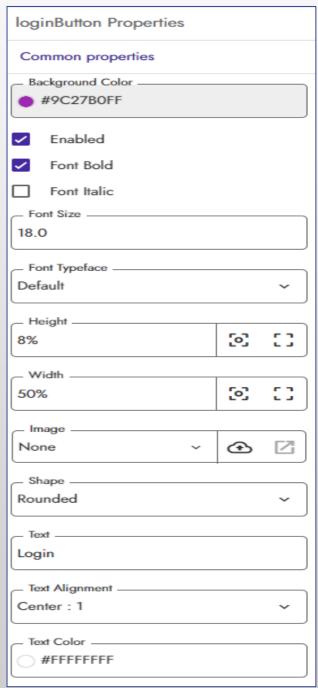


Layout Palette 12

### 12.3 Rename both buttons to "loginButton" and "closeLoginButton"



#### 12.4 Set properties for both buttons.





Layout Palette 11

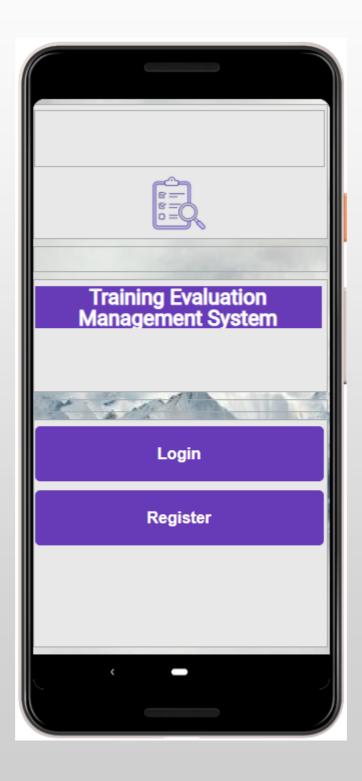
12.5 In loginFormContainer properties,

uncheck Visible to hide the loginFormContainer at the start of the application being executed.

logi	nFormContainer Proper	rties			
Con	nmon properties				
_ Al	ign Horizontal				
Cer	nter: 3		~		
_ AI	ign Vertical				
Тор	:1		~		
_ Ba	ackground Color				
•	#673AB7FF				
	Clickable				
_ H	eight				
Fill	Fill parent				
_ W	idth				
Fill	parent	[6]			
_ In	nage				
	one v	<b>①</b>			
<b>✓</b>	Scrollbar				
	Use Round Card				
	Visible				
	Is Card				



### Final User Interface Design





# Preparing The BLOCK





#### **Palette Utilities**

1

#### 1.1 Choose from Pallete Utilities



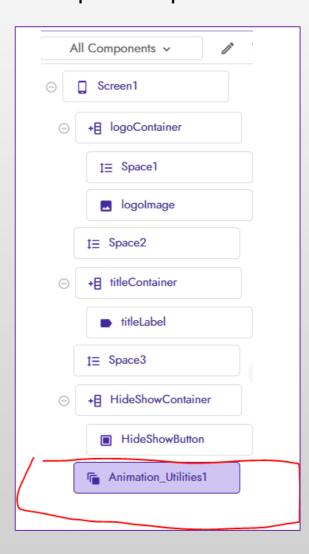
## 1.2 Drag the animation utilities component into application

myFirstKodulor			Scre
Pale	ette		Q
[0]		Animation Utilities	(i)
	Ω	Audio	(i)
<b>(</b>	<b>[</b> 1)	Battery Utilities	(i)
<i> </i>	۵.	Color Utilities	<u>(i)</u>
<b>Ø</b>	â	Cryptography	(i)
<b>©</b>	₩.	Decoration	(i)
<u></u>		Device Utilities	(i)
	<b>≅</b>	Image Utilities	<b>(i)</b>



#### Palette Utilities

#### 1.3 It will appear in All Components panel



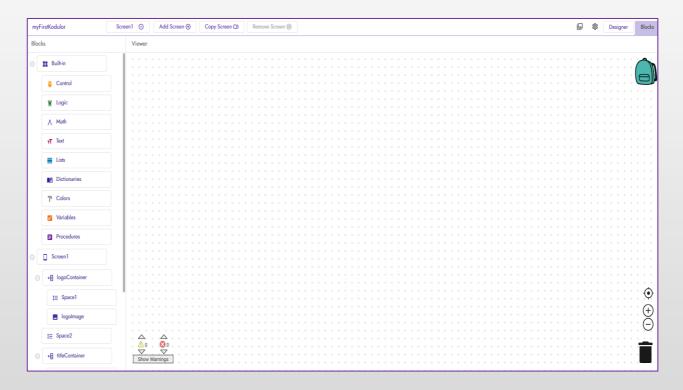
1.4 Choose Block from the right panel



**Palette Utilities** 

1

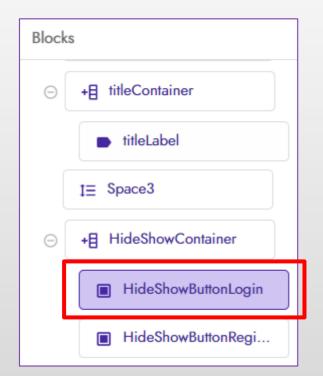
1.5 Viewer for writing the codes appear



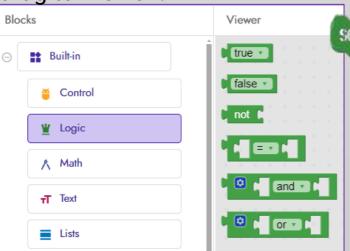


#### Block Utilities 1

1.6 Choose HideShowButtonLogin from left Blocks panel



1.9a Choose block **false** from Logic blocks then drag to Viewer.



1.7 Choose following block from HideShowButtonLogin blocks then drag to Viewer.

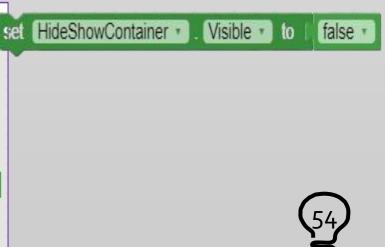
8	when	when HideShowButtonLogin									.C	.Click		
do													+	

1.8 Choose following block from

HideShowContainer blocks then drag to Viewer.

set	HideShowContainer •	).	Visible •	to N
$\overline{}$			7 7 7	7 7

1.9b Set block **false** to block set HideShowContainer

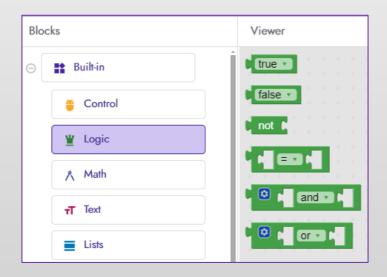


#### Block Utilities 1

1.9c Choose following block from loginFormContainer blocks then drag to Viewer.



1.9d Choose block **true** from Logic blocks then drag to Viewer .



1.9e Set block true to block set loginFormContainer



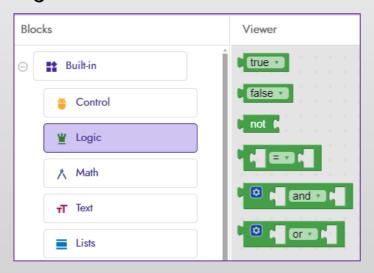


#### Block Utilities 1

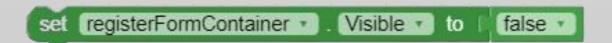
1.9f Choose following block from registerFormContainer blocks then drag to Viewer.



1.9g Choose block **false** from Logic blocks then drag to Viewer .



1.9h Set block false to block set registerFormContainer





#### Block Utilities 1

2.1a Choose following block from Animation\_Utilities1 blocks then drag to Viewer.

2.1b Choose following block from loginFormContainer blocks then drag to Viewer.

```
loginFormContainer •
```

2.1c Choose **THREE (3)** following blocks from Math blocks then drag to Viewer then set the values.



1500



Animation to Hide and Show Container 2

2.2 Then put all the blocks from 1.7 until 2.1c to complete the Code to hide and show loginFormContainer when button HideShowButtonLogin is clicked.

```
when HideShowButtonLogin
    set HideShowContainer •
                               Visible •
                                               false *
    set loginFormContainer . Visible to
                                               true *
    set registerFormContainer *
                                 Visible to
                                                 false
    call Animation Utilities1 . Bounce Vertical
                                                loginFormContainer
                                   component (
                                                1000
                                 start Position
                                  end Position
                                                1500
                                      duration
```



Animation to Hide and Show Container 2

2.3 Code to hide and show registerFormContainer when button HideShowButtonRegister is clicked.

```
when HideShowButtonRegister
    set HideShowContainer *
                                Visible to
                                                false *
     set loginFormContainer *
                                Visible to
                                                false *
     set registerFormContainer *
                                 . Visible to
                                                  true
     call Animation Utilities1 ... Bounce Vertical
                                                 registerFormContainer
                                    component |
                                  start Position
                                                 1000
                                  end Position
                                                 1500
                                      duration
```

Repeat steps in slide 58 until 62 for code to hide and show registerFormContainer when button HideShowButtonRegister is clicked.

Animation to Hide and Show Container 2

2.4 Code to close loginFormContainer when button closeLoginButton is clicked.

```
when closeLoginButton Click
                            Visible to
    set HideShowContainer
                                            true *
    set loginFormContainer . Visible to
                                            false *
                                              false
    set registerFormContainer . Visible to
    call Animation Utilities1 . Bounce Vertical
                                             loginFormContainer •
                                 component
                                             1000
                               start Position
                                end Position
                                             1500
                                   duration
```

Repeat steps in slide 58 until 62 for code to close loginFormContainer when button closeLoginButton is clicked.



Animation to Hide and Show Container 2

2.5 Code to close registerFormContainer when button closeRegisterButton is clicked.

```
when closeRegisterButton Click
   set HideShowContainer •
                             . Visible to
                                             true *
    set loginFormContainer . Visible to
                                             false *
                                               false
    set registerFormContainer . Visible to
    call Animation Utilities1 . Bounce Vertical
                                              HideShowContainer •
                                  component |
                                              1000
                                start Position
                                 end Position
                                              1500
                                    duration
```

Repeat steps in slide 58 until 62 for code to close registerFormContainer when button closeRegisterButton is clicked.

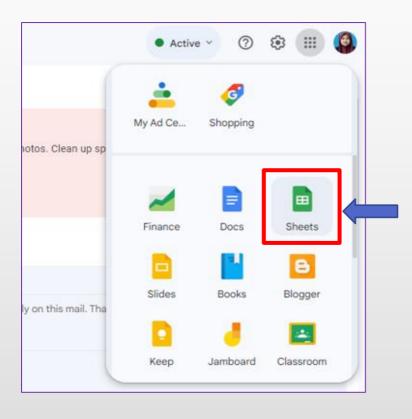


# Preparing The DATABASE





# Preparing The Database



1. Create Sheets Excel in your google account.

	А	В •
1	txtUsername	txtPassword
2	madihah	madihah@123
3	ainul	ainul@123
4		
5		
6		

2a. Create TWO (2) columns which is first column, named as txtUsername and second column, named as txtPassword.

2b. Insert TWO (2) dummy data for both columns.

# Preparing The Database

3. Share link Sheets Excel by clicking Share button on the top right of your google account.



4. Share link Sheets Excel, by choosing General access Anyone with the link, then click Copy link button and click Done button.

Sha	re "List of Users"		?	<b>(\$)</b>	
Ad	ld people, groups, and calendar events				
Peop	le with access				
	SITI SARAH MALINI BINTI MOHD HANIFA (PKT) (yo u) sitisarah@pkt.edu.my		Owne	er	
Gene	eral access				
•	Anyone with the link ▼ Anyone on the internet with the link can view	Viewe	er ▼	,	
(6)	Copy link	C C	Oone		



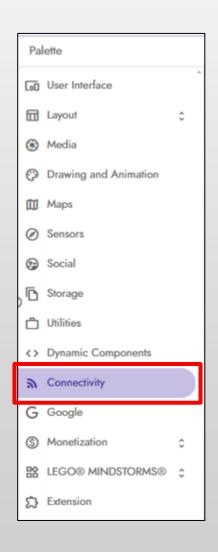
# Preparing The SETTING LOGIN UTILITIES

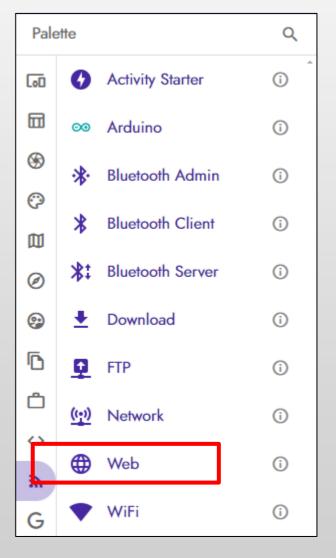




### Preparing The Setting Login Utilities

 Choose layout Palette from the left side, then choose Connectivity component and drag Web into Screen1.

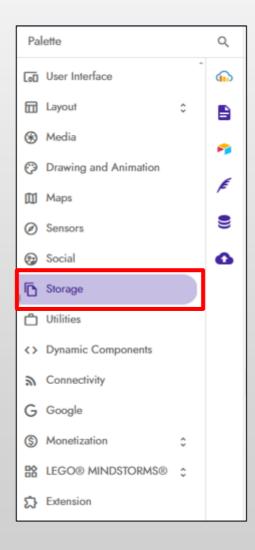


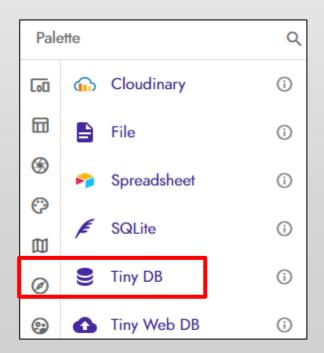




### Preparing The Setting Login Utilities

 Choose layout Palette from the left side, then choose Storage component and drag Tiny DB into Screen1



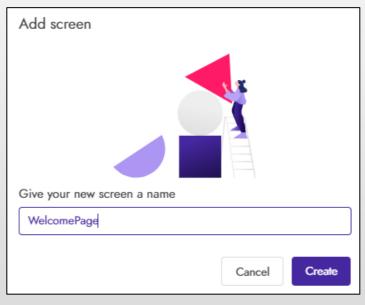




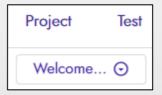
3a. Create second screen.

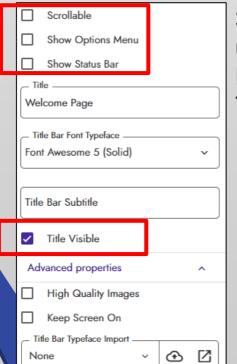


3b. Create second screen named as WelcomePage.



3c. Click the WelcomePage screen find the background image, then choose image.

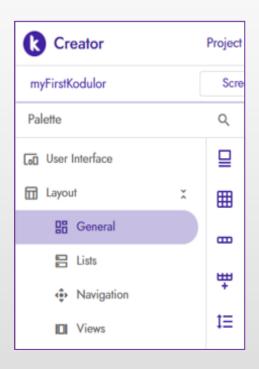


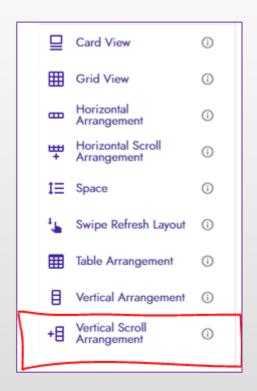


3d. In WelcomePage screen Properties, uncheck the Scrollable, Show Options Menu and Show Status Bar, the check Title Visible.

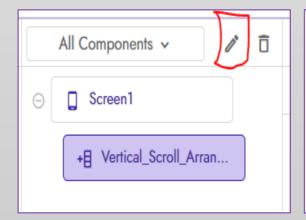


4. Choose layout palette from the left side, then choose Vertical Scroll Arrangement component and drag into the WelcomePage screen.





5. Rename the component into "infoContainer".





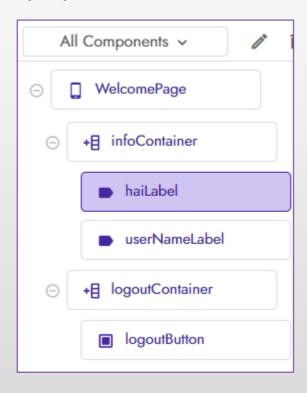


6. Setting the infoContainer properties.

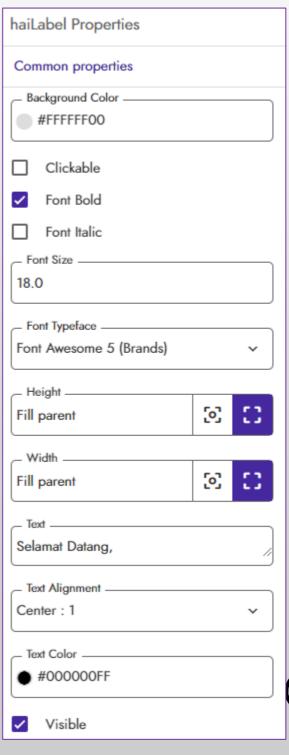
infoContainer Properties		
Common properties		
_ Align Horizontal		
Center : 3		~
_ Align Vertical		
Top : 1		~
Background Color		
#0000000		
☐ Clickable		
_ Height		
Automatic	(6)	
_ Width		
Fill parent	[6]	
_ Image		
None	<b>①</b>	
✓ Scrollbar		
Use Round Card		
✓ Visible		
☐ Is Card		



7. Choose layout palette from the left side, then choose User Interface and drag Label component into the infoContainer in WelcomePage screen. Then, rename the Label component to haiLabel and setting the haiLabel properties.

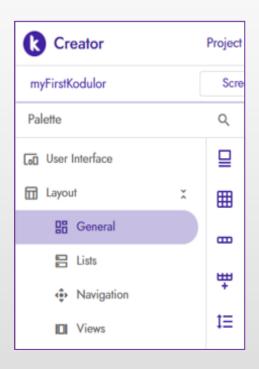


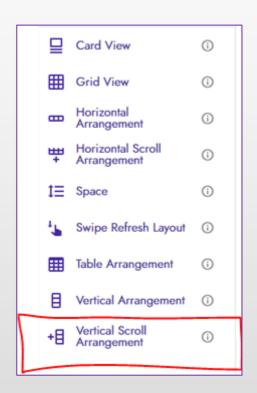
Repeat step 7, for next Label component, rename it as userNameLabel.



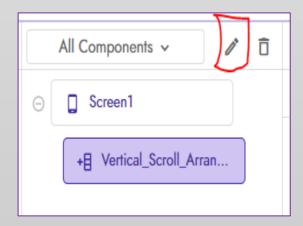


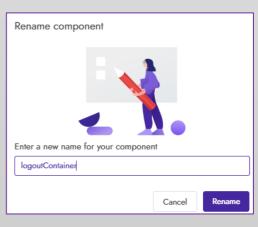
8. Choose layout palette from the left side, then choose Vertical Scroll Arrangement component and drag into the WelcomePage screen.





9. Rename the component into "logoutContainer".



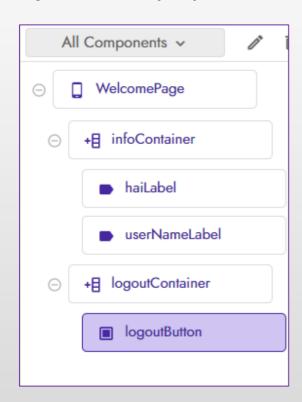


10. Setting the logoutContainer properties.

logo	outContainer Properties		
Con	nmon properties		
_ Al	ign Horizontal ————		
Cer	nter: 3		~
_ AI	ign Vertical		
Тор	:1		~
_ Ba	ckground Color		
	#0000000		
	Clickable		
_ H	eight		
Aut	omatic	<b>©</b>	[]
_ w	idth		_
Fill	parent	[6]	
_ In	nage		
No	one v	<b>①</b>	Ø
~	Scrollbar		
	Use Round Card		
~	Visible		
	Is Card		

11. Choose layout palette from the left side, then choose User Interface and drag Button component into the logoutContainer in WelcomePage screen. Then, rename the button component to logoutButton and setting the

logoutButton properties.



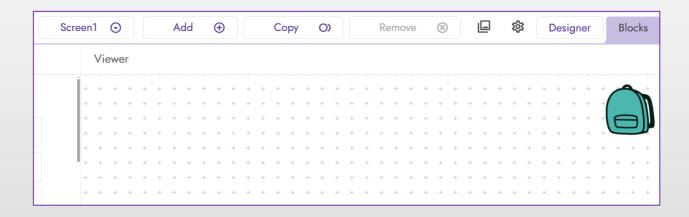
logoutButton Properties				
Common properties				
Background Color				
● #9C27B0FF				
Enabled				
✓ Font Bold				
Font Italic				
Font Size				
18.0				
Font Typeface				
Font Awesome 5 (Brands)				
Height —				
7%	[6]	::		
Width				
50%	[6]	[]		
_ Image				
None v	<b>①</b>			
_ Shape				
Rounded		~		
_ Text				
Logout				
Text Alignment				
Center : 1		~		
_ Text Color				
#FFFFFFF				
✓ Visible				



#### **Preparing The Block**

#### Login Process 1

1. Coding for Login process will be write in Viewer Block of Screen1.



2. Choose **THREE (3)** following blocks from Variables blocks, then drag to viewer.

```
initialize global name to 🕨
```

3. Choose **THREE (3)** following blocks from Lists blocks, then drag to viewer.



#### **Preparing The Block**



4. Initialize each block with the following values, then set each initialized block with following Lists blocks.

```
initialize global SPREADSHEET to create empty list

initialize global From_column_txtUsername to create empty list

initialize global From_column_txtPassword to create empty list
```

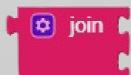
5. Choose following blocks from Screen1 blocks, then drag to viewer.

```
when Screen1 .Initialize do
```

6a. Choose following blocks from Web1 blocks, then drag to viewer.

```
set Web1 . URL to C
```

6b. Choose following blocks from Text blocks, then drag to viewer.





#### **Preparing The Block**

#### Login Process 1

6c. Choose **TWO** (2) following blocks from Text blocks, then drag to viewer. Put the link of Sheet Excel in first block and the following syntax in second block.

```
https://docs.google.com/spreadsheets/d/1BRbr7sOs...
```

6d. Choose following blocks from Web1 blocks, then drag to viewer.

```
call Web1 .Get
```

7. Complete Code when initialize Screen1 by calling link Sheet Excel (refer setting database utilities – page 65)

```
when Screen1 .Initialize

do set Web1 . URL to join factorial to join factorial format format
```

# Preparing The STORAGE





To Store Data to Tiny\_DB1 Storage 1

1a. Choose following block from Web1 blocks drag to Viewer.

```
when Web1 .Got File

url response Code response Type file Name

do
```

1b. Choose following block from Variables blocks and drag to Viewer then set global SPREADSHEET.

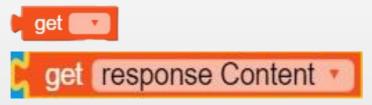
```
initialize global SPREADSHEET to
```

1c. Choose following block from Lists blocks drag to Viewer.

create empty list

To Store Data to Tiny\_DB1 Storage 1

1d. Choose following block from Variables blocks then drag to Viewer and get response Content.



1e. Choose following block from Procedures block and drag to Viewer.

```
call STORE_TO_TINYDB •
```

1f. Choose following block from Procedures blocks, then drag to Viewer and changes procedures to STORE\_TO\_TINYDB.

```
to procedure
do

to STORE_TO_TINYDB2
do
```

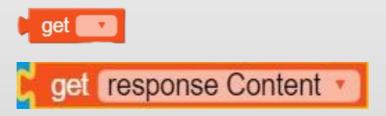


To Store Data to Tiny\_DB1 Storage 1

1g. Choose following block from Lists blocks, then drag to Viewer. Duplicate

remove list item list index

1h. Choose following block from Variables blocks then drag to Viewer and get global SPREADSHEET.



1i. Choose following block from Math blocks then drag to Viewer and set value 1.



To Store Data to Tiny\_DB1 Storage

1j. Combine the following blocks.

```
remove list item list get global SPREADSHEET index
```

1k. Choose following block from Control blocks then drag to Viewer and Get global SPREADSHEET

```
for each item in list get global SPREADSHEET
```

11. Choose following block from Lists blocks then drag to Viewer and set get global From\_column\_txtUsername

```
add items to list | get global From_column_txtUsername v item
```

To Store Data to Tiny\_DB1 Storage 1

1m. Choose and combine the following blocks.

```
select list item list get item index
```

1n. Full code for retrieving both columns name from link Sheet

To Store Data to Tiny\_DB1 Storage 1

1o. Full code for reading data in each line of row from link Sheet Excel

```
when Web1 Got Text

url response Code response Type response Content

do set global SPREADSHEET to list from csv table text get response Content

call STORE_TO_TINYDB
```



To Store Data to Tiny\_DB1 Storage 1

1p. Complete codes To Store Data to Tiny\_DB1 Storage

```
to STORE TO TINYDB
 remove list item list get global SPREADSHEET
 for each item in list | get global SPREADSHEET *
    add items to list list get global From_column_txtUsemame
                               select list item list get item
                                         index
      add items to list list
                              get global From_column_txtPassword =
                               select list item list get item
                       item
                                         index
 for each number from
                        length of list list get global SPREADSHEET
      call Tiny DB1 . Store Value
                                                        gel global From_column_bxtUsername •
                                    select list item list
                                                        number •
                                     make a list
                     value To Store
                                                     select list item list
                                                                        get global From column txtPassword •
                                                                index
                                                                        get number -
```



#### Code For Login Process 2

2a. Complete codes for Login Process to allow user to access Welcome Page when username and Password exits in link Sheet Excel.

```
when loginButton - Click
do (is empty ( txtUsername )
    then call Notifieral Show Alert
                                      Please Fill In Username
                         contains text call Tiny DB1 Get Entries
                                piece txtUsername -
          then call Notifier Show Alert
                                           Wrong Usernamell
                is empty txtPassword Text
                then call Notifier Show Alert
                                                Please Fill In Passwordll
                                        notice
                                      select list item list | call | Tiny DB1 | Get Value
                                                                             tag txtUsername
                                                              value If Tag Not There
                               = + txtPassword +
                           call Notifier1 ... Show Alert
                                                       Success
                                                                     txtUsername
                            call Notifier1 . Show Alert
                                                       Not Success
```

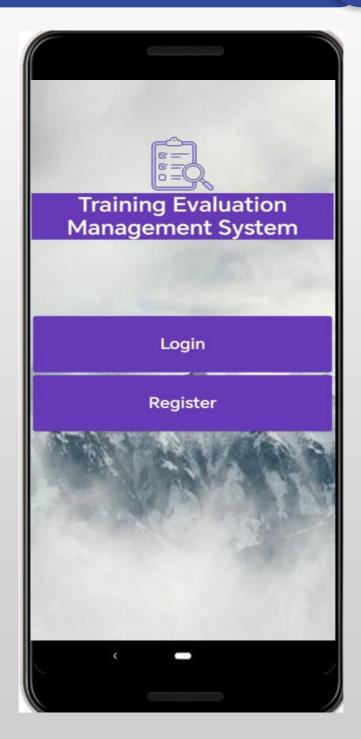


## Successfully BUILT





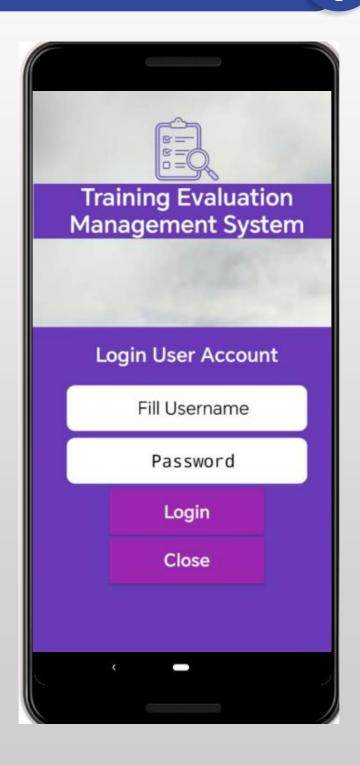
Main Interface 3





Interface for Login

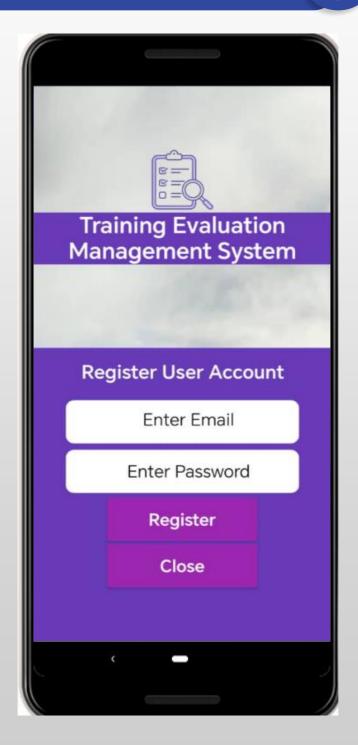
3





Interface for Register

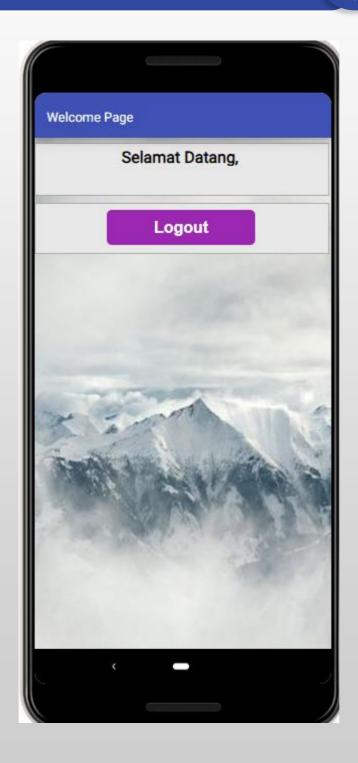
3





Interface for Welcome Page

3





# Notes



Kodular is a user-friendly drag-and-drop mobile app development platform designed for creating Android applications without the need for coding. It provides an intuitive interface where users can design app layouts by simply dragging and dropping various components. With its visual programming environment, users can create app functionalities by connecting blocks, eliminating the need for writing code manually. Kodular offers a wide range of components, including buttons, text boxes, sensors, and more, enabling users to build feature-rich apps easily. Additionally, Kodular facilitates real-time testing through its companion app, allowing developers to instantly see how their apps behave on Android devices. The platform also supports the use of extensions for incorporating advanced functionalities into apps. Being a cloud-based platform, Kodular allows users to access and work on their projects from any device with an internet connection. It offers comprehensive documentation and active community support, making it suitable for both beginners and experienced developers looking to create Android apps quickly and efficiently.





Politeknik Kuala Terengganu (online)