INDEX: 2022t01556   **NAME: Navodya D.D.A**

1. <u>Introduction</u>

"FOT Alerts" is a mobile application designed to provide the latest news, events, and academic updates for students at the Faculty of Technology, University of Colombo. The application interface was created using Figma and follows Google's Material Design guidelines to ensure usability, accessibility, and a visually appealing user experience.

2. <u>Material Design Guidelines Used</u>

1. **Buttons**: Material Contained Buttons with 48dp height and slight elevation.

2. **Text Fields**: Material Text Fields with label text.

3. **Icons:** Material Design icons (24dp × 24dp) were used for consistent visuals and to maintain standard sizing across the application.

4. **Spacing**: 8dp grid system used for alignment and margins to maintain a structured layout.

5. **Typography**: Hierarchical font sizes for headlines, body text, and captions.

6. **Navigation**: Drawer navigation with a hamburger menu icon.

7. **Elevation:** Elevation levels were used for cards and buttons to create a clear sense of hierarchy and depth.

8. **Color Theme:** The application follows a primary color theme **deep purple('#6200EE')** with accent colors according to Material Design standards.

3. Color Scheme

The color theme was chosen to reflect trust, urgency, and clarity:

- Deep purple ('#6200EE')as the primary color symbolizes professionalism and calm, perfect for academic content.

- Red (`#FF1010`) as an accent color highlights urgency, caution or potential consequences to the user.

- Light pastel purple (generic) provided a clean background that enhances readability. (This color (#F3DEFF) used for app background color)

- Light grey is used for alerts because it offers soft contrast against white text areas, keeping the UI clean.

4. Screens designed

Splash screen
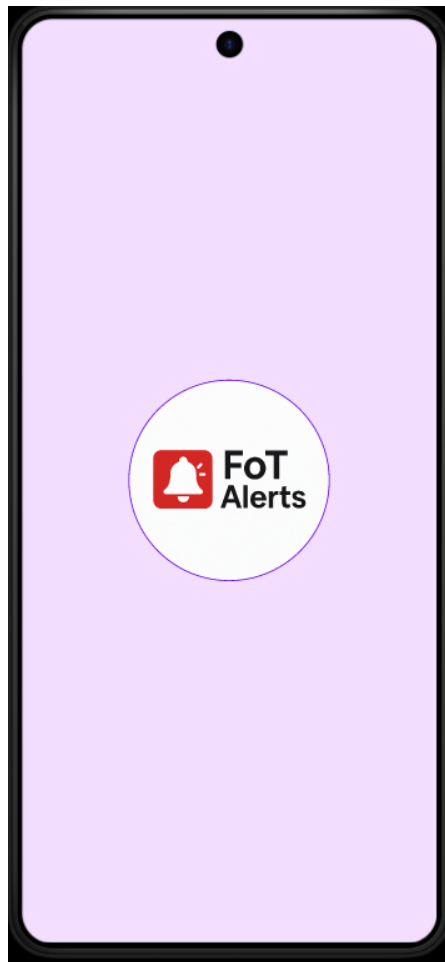
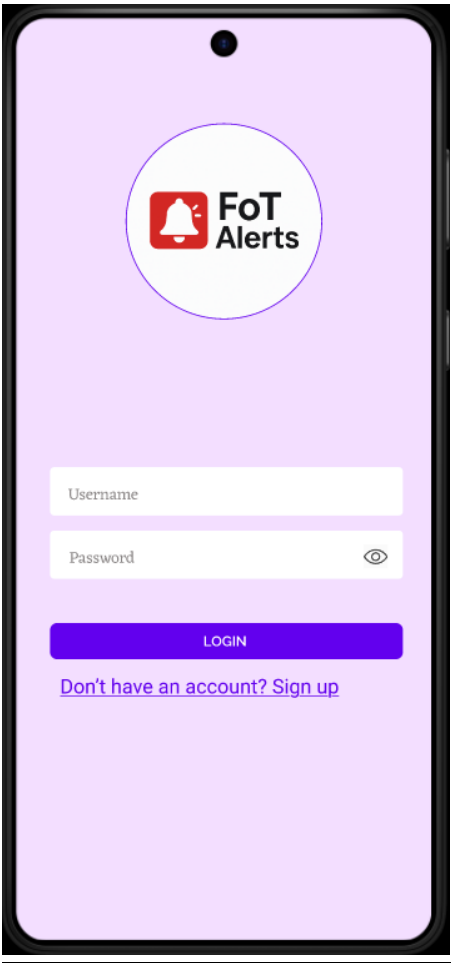❖ **Purpose :** The main purpose of this screen is to Introduces the application and brand identity while loading.

❖ **Components :**

1. App logo

❖ Design Guidelines Table:

Component	Component Name	Type	Width	Height	Padding/Margin	Notes
1	App Logo	Image	200dp	200dp	Centered (Vertically and Horizontally)	Displays app logo

Login screen

❖ **Purpose :** This Allows users to log in safely by entering their username and password
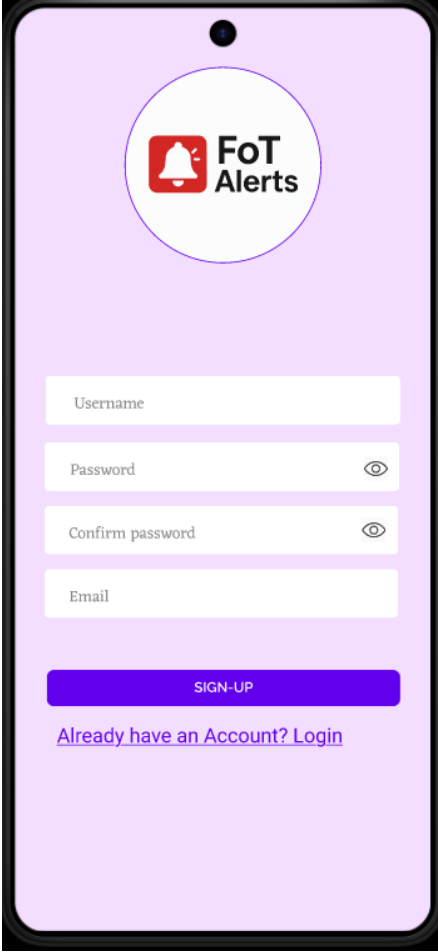
❖ **Components**
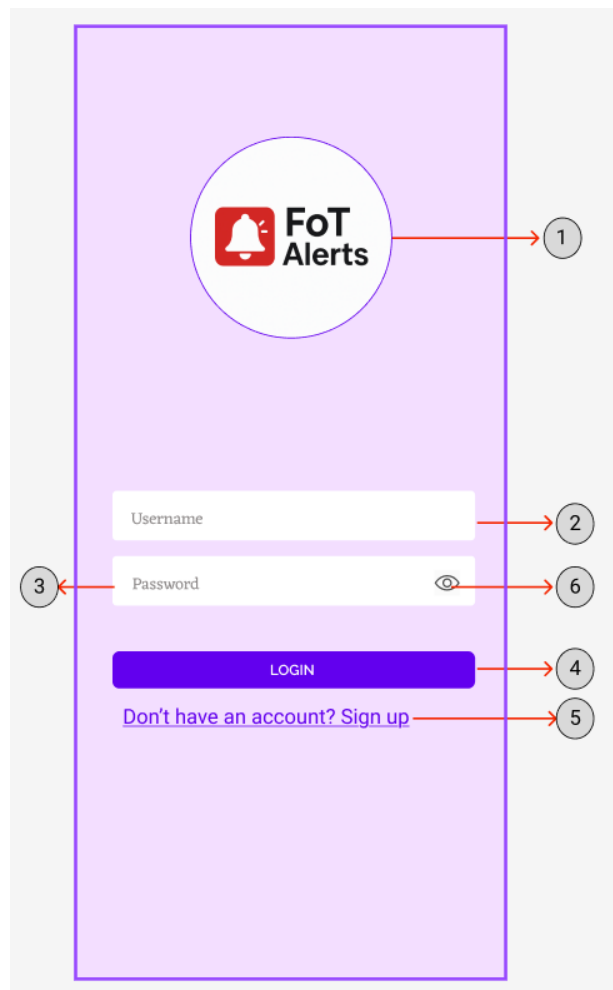
1. App logo
2. Username Text field
3. Password Text field
4. LOGIN button
5. Sign up link
6. Show/hide password

❖ Design Guidelines Table:

#	Component	Type	Width	Height	Typeface / Font/ Size/ Case	Padding/ Margin	Color	Corner Radius	Description
1	App Logo	Image	195dp	195dp	Roboto Bold	Centered	#FFFFFF #6200EE #000000 #C1081E	136	Displays app logo
2	Username Textfield	Text Field (Filled Text Field)	350dp	48dp	-	Centered , 8dp below	# FFFFFF	4dp	Get username as input
	Username, password label	Text	Auto	Auto	Eczar, Regular, 16, Title caps		-	-	Identify the purpose of each input field
3	Password	Text Field (Filled Text Field)	350dp	48dp	Eczar, Regular, 16, Title caps	Centered , 8dp Top & below	#FFFFFF	4dp	Get password as input
4	Login button	Contained Button	350dp	36dp	Raleway, Semibold ,14,Title caps	32dp top	#6200EE	7dp	Outlined button
5	Sign Up link	Text Link	Auto	Auto	Roboto, Regular, 20, Title caps	Centered / 8dp top & bottom	#6200EE	-	Sign up form navigation
6	Show/ Hide password	Icon	24dp	24dp	-	8dp right		-	Password visibility toggle
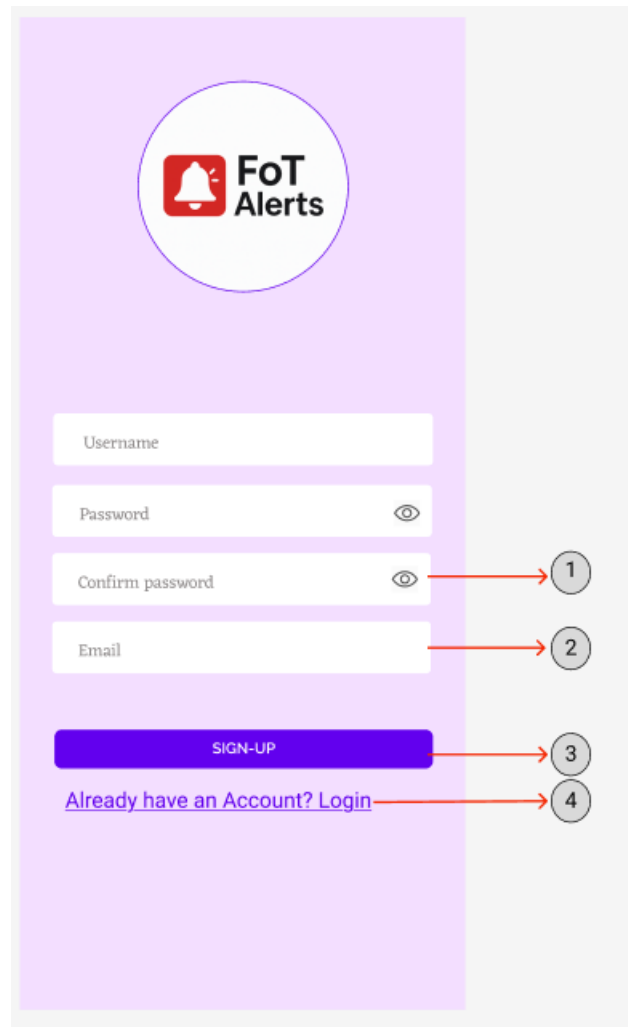
Sign-up Screen

❖ **Purpose :** From using this new users can register an account.

❖ Components :

Similar to login, with additional fields for **,**

1. Confirm Password

2. Email

3. Sign-Up button

4. Login link

❖ Design Guidelines Table:

#	Component	Type	Width	Height	Typeface / Font/ Size/ Case	Padding/ Margin	Color	Corner Radius	Description
1	Confirm Password	Text Field (Filled Text Field)	350dp	48dp	Eczar, Regular, 16, Title caps	Centered, 8dp Top & below	#FFFFFF	4dp	Get password as input
2	Email	Text Field (Filled Text Field)	350dp	48dp	Eczar, Regular, 16, Title caps	32dp top	# FFFFFF	4dp	Get email as input
3	Sign-Up button	Contained Button	350dp	36dp	Raleway, Semibold ,14,Title caps	Centered/ 8dp top & bottom	#6200EE	7dp	After filling the text fields, user can sign-up by clicking this button.
4	Login link	Text	Auto	Auto	Roboto, Regular, 20, Title caps	8dp right	#6200EE	-	User can login by using this login link,if user already have an account.

News Screen
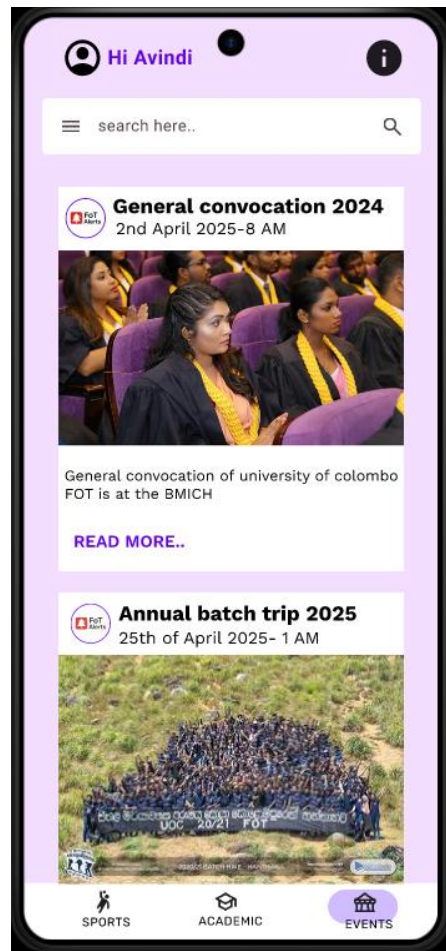
❖ **Purpose:** This Displays latest news categorized by type. User can select the NEWS type by bottom navigation bar and then he can select NEWS cards for check each NEWS.

❖ Components:
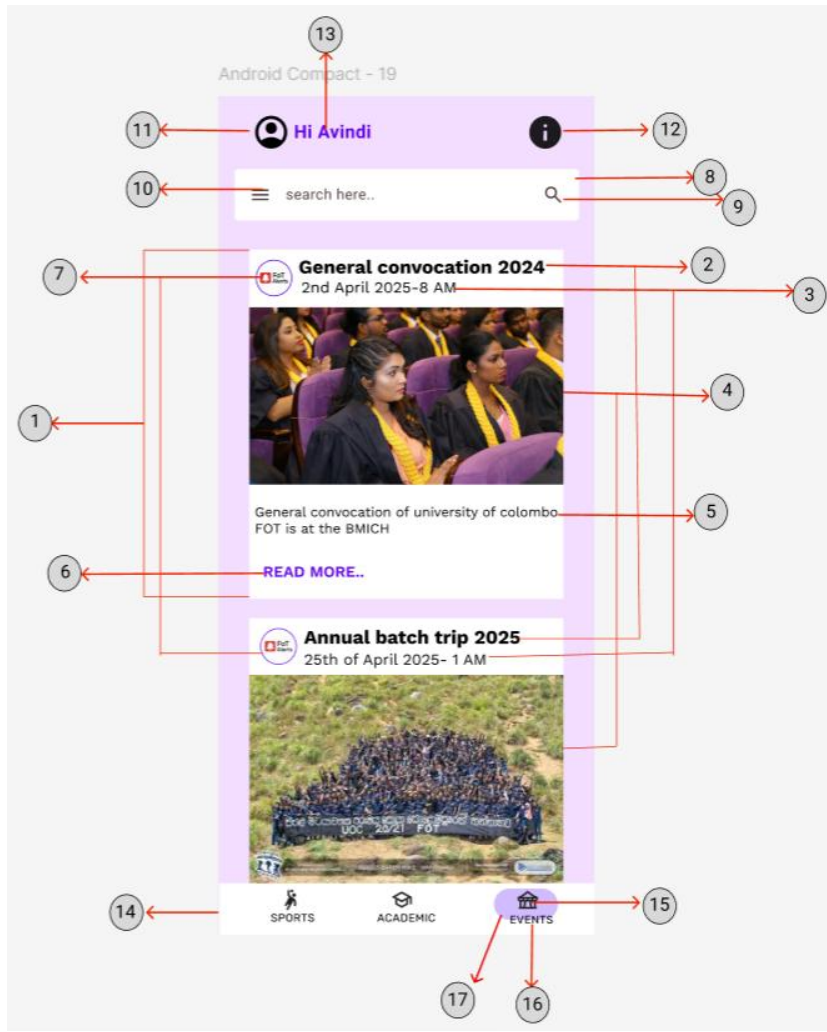
1. News card
2. Header text
3. Secondary text(Date,time)
4. Media(photo)
5. Supporting text
6. Read more button
7. Thumbnail(logo)
8. Search bar
9. Search icon
10. Menu icon

11. Profile icon
12. Info icon
13. Greeting text
14. Bottom navigation bar
15. Active Nav. icon
16. Navigation icon label
17. Active Nav. label

❖ Design Guidelines Table:

#	Component	Type	Width	Height	Typeface / Font/ Size/ Case	Padding/ Margin	Color	Corner Radius	Description
1	News card	Card	344dp	382dp		Centered	#FFFFFF	0dp	Container card for each news item(image, title, date,read more link)
2	Header text	Text	Auto	Auto	Work Sans,Bold ,21, Title case	Centered, 8dp below	000000	-	Header (Headline) for the NEWS.
3	Secondary text (Date, time)	Text	Auto	Auto	Work Sans, Regular, 17, Title case	Centered, 8dp Top & below	000000	-	This includes date and time of the NEWS.
4	Media (photo)	Image card	344dp	194dp	-	32dp top		0dp	Image for the relevant NEWS.
5	Supporting text	Text	Auto	Auto	Work Sans, Regular, 15, Title case	Centered/ 8dp top & bottom	000000	-	Small description about relevant NEWS.
6	Read more button	Text Button	Auto	Auto	Work Sans, Semibold , 17, All caps	8dp right	#6200EE	-	User can access the NEWS detail screen by clicking this Read more button he can read more NEWS

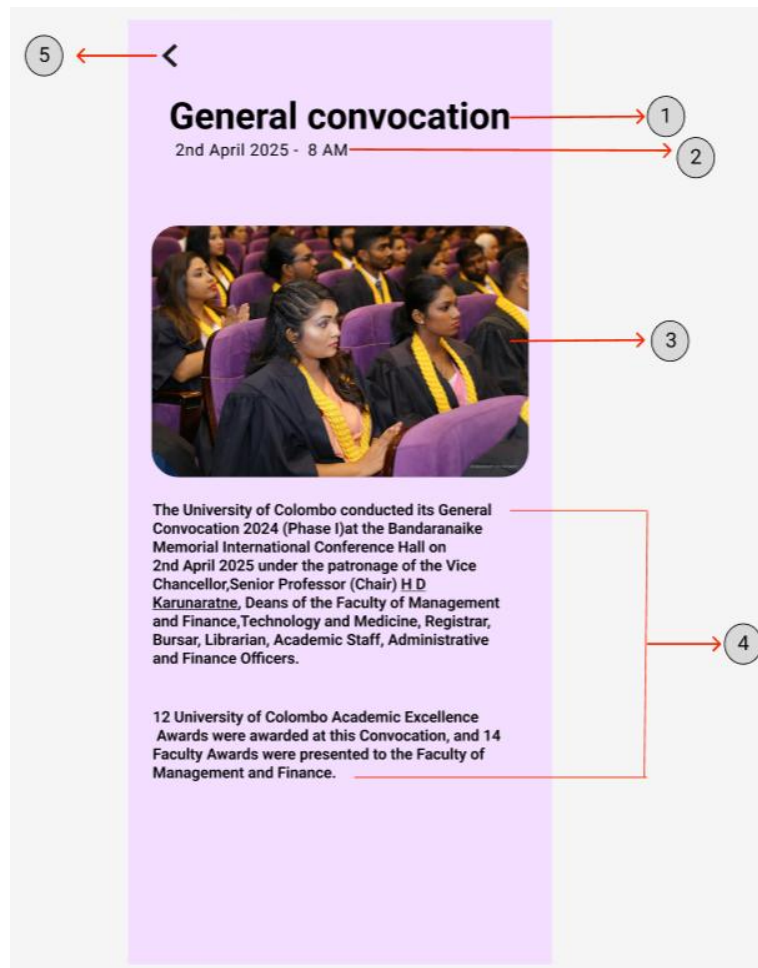| #	Name	Type	Width	Height	Font		Color		Description
									info. From that screen.
7	Thumbnail (logo)	Thumbnail	40dp	40dp	-		logo	136dp	Card include app logo here.
8	Search bar	Icon	412dp	56dp			#FFFFFF	4dp	User can search NEWS by using search bar.
9	Search icon	Icon	24dp	24dp	-			-	Icon inside the search bar to initiate or clear search.
10	Menu icon	Icon	24dp	24dp	-			-	Icon for more menus.
11	Profile icon	Icon	24dp	24dp	-			-	User profile avatar icon at the top-left corner.
12	Info. icon	Icon	24dp	24dp	-			-	Icon for help or app info. (Developer information)
13	Greeting text	Text	Auto	Auto	Roboto, Bold, 20, All caps		#6200EE	-	Personalized user welcome message at the top of the screen.
14	Bottom Navigation bar	Navigation bar	412dp	56dp	-		# FFFFFF	0dp	Floating navigation bar for switching between app section.
15	Active Nav. Icon	Icon	24dp	24dp	-			-	The icon, which selected by the user.
16	Navigation icon label	Text	-	-	Rubik, Regular, 12, All caps		000000	-	Label text for selected navigation item. (EVENTS)
17	Active Nav. label	Text	Auto	Auto	-	-	#F3DEFF	0dp	This apply when user select a navigation icon.

NEWS Detail Screen
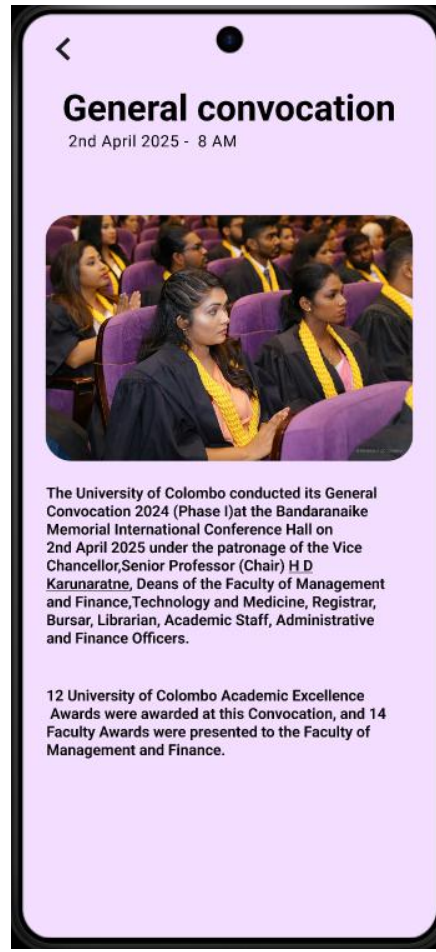
❖ **Purpose:** This View detailed news content.
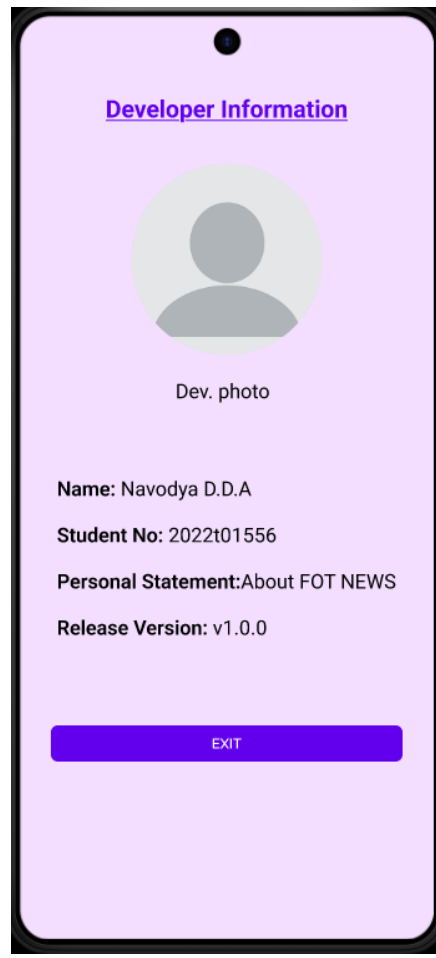
❖ Components:

1. News Headline Text
2. Secondary Text(Date,Time)
3. News image banner
4. News Description Text
5. Back button

❖ Design Guidelines Table:

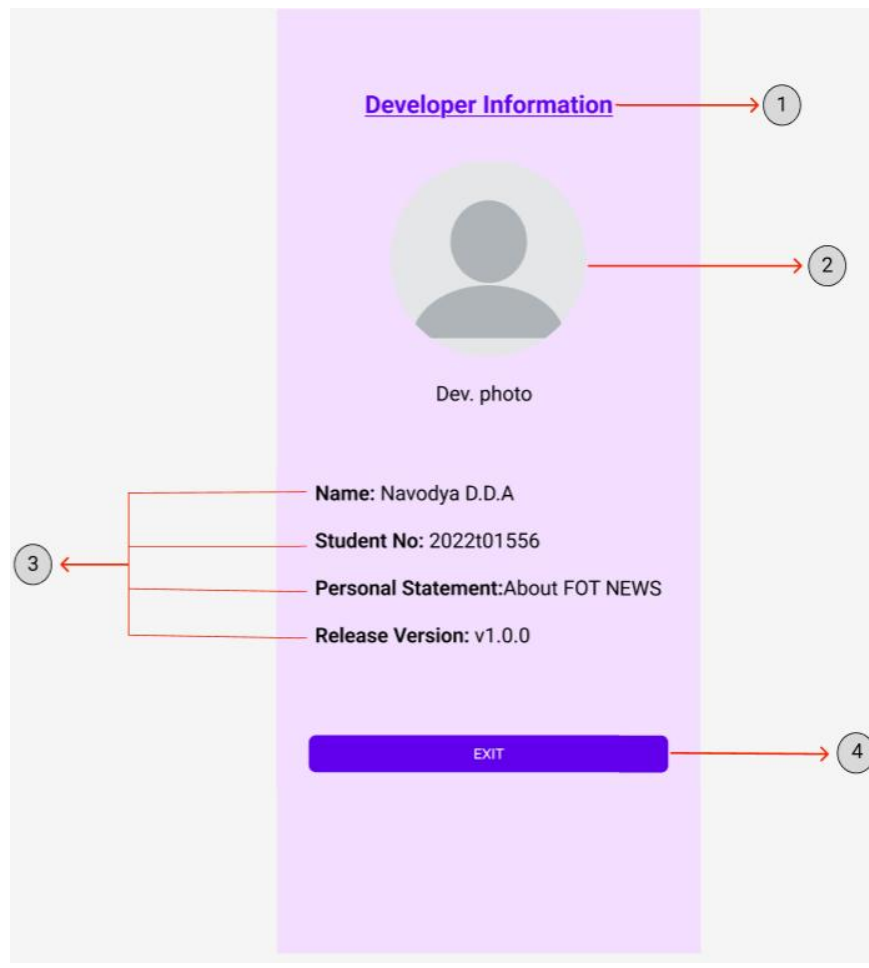| #	Component	Type	Width	Height	Typeface / Font/ Size/ Case	Padding/ Margin	Color	Corner Radius	Description
1	News Headline Text	Text	Auto	Auto	Roboto, Bold,36, Title caps	Centered	000000	-	Headline for NEWS.
2	Secondary Text (Date,Time)	Text	Auto	Auto	Roboto, Bold,16, Title caps	Centered, 8dp below	000000	-	This includes date and time of the NEWS.
3	News image banner	Image	366dp	244dp	-	Centered, 8dp Top & below		26dp	Image for relevant NEWS.
4	News Description Text	Text	320dp	48dp	Roboto, Semibold ,20	32dp top	000000	-	This includes complete NEWS information.
5	Back icon	Icon	24dp	24dp	-	Centered/ 8dp top & bottom	000000		Icon button to navigate back to the previous screen.

Developer Info Screen

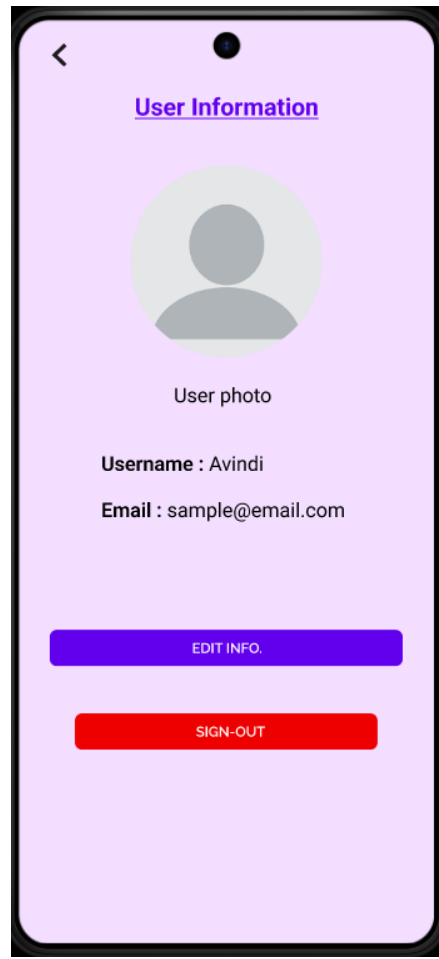❖ **Purpose:** This Displays developer's details.

❖ Components:

1. Section Title Text
2. Profile photo
3. Developer Detail Text
4. Exit Button

❖ Design Guidelines Table:

#	Component	Type	Width	Height	Typeface / Font/ Size/ Case	Padding/ Margin	Color	Corner Radius	Description
1	Section Title Text	Text	Auto	Auto	Roboto, Bold,24, Title case	Centered	#6200EE	-	"Developer Information " is the title here.
2	Profile photo	Image	190dp	190dp	-	Centered, 8dp below	-	112.5 dp	Displays developer's photo in circular avatar format .
3	Developer Detail Text	Text	Auto	Auto	Roboto, Mixed, 20, Title case	Centered, 8dp Top & below	000000	-	Displays developer's Name, Student no., Personal statement, and Release version
4	Exit Button	Contained Button	350dp	36dp	Raleway, semibold, 14,All caps	Top:32dp from last text	#6200EE	7dp	User can exit Developer Information Screen and back to the NEWS screen by clicking this exit button.

User Info Screen

❖ **Purpose:** This displays User's details and user can edit his information if he wants. The user can sign-out by using this screen.

❖ Components:
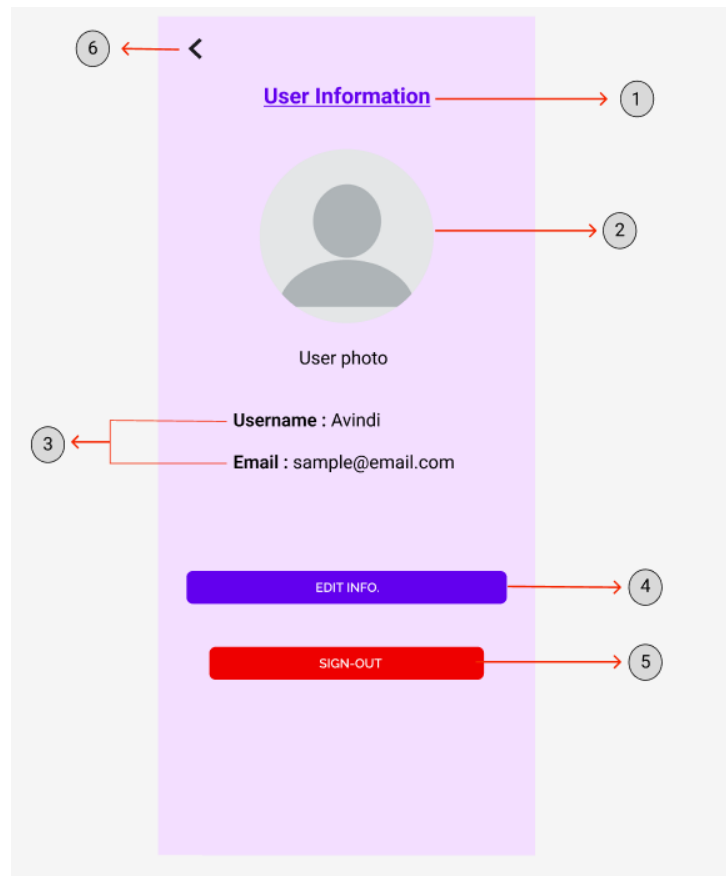
1. Section Header Text
2. Profile Photo(user)
3. User Detail Text
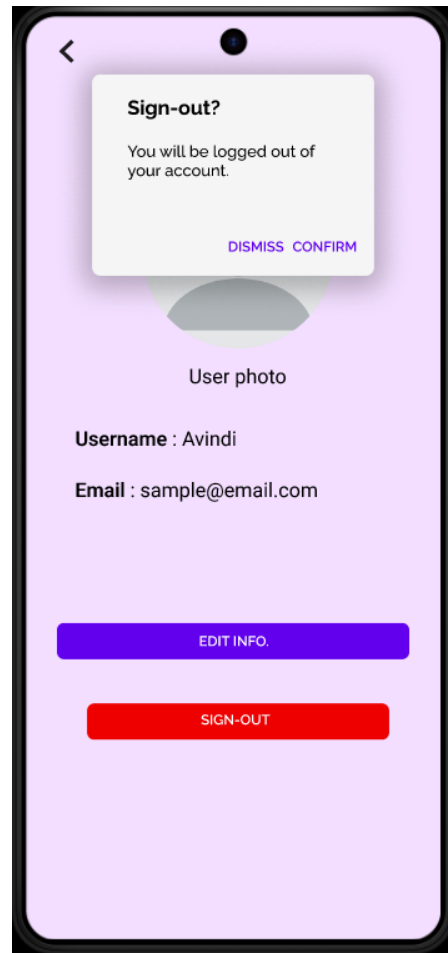4. Edit Info. Button
5. Sign-Out Button
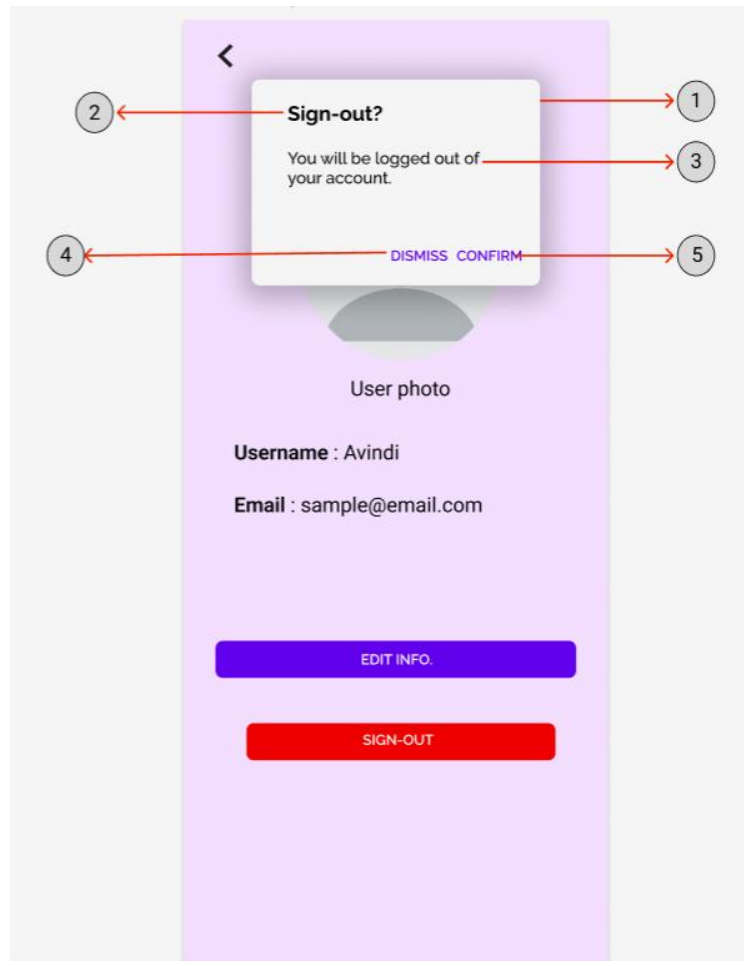6. Back Button

❖ Design Guidelines Table:

#	Component	Type	Width	Height	Typeface / Font/ Size/ Case	Padding/ Margin	Color	Corner Radius	Description
1	Section Header Text	Text	Auto	Auto	Roboto, Bold,24, Title case	Centered	#6200EE	-	"User Information " is the title here.
2	Profile Photo(user)	Image	190dp	190dp	-	Centered, 8dp below		112.5 dp	Displays user's photo in circular avatar format .
3	User Detail Text	Text	Auto	Auto	Roboto, Mixed, 20, Title case	Centered, 8dp Top & below	000000	-	Displays user's Username, Email
4	Edit Info. Button	Contained Button	320dp	48dp	Raleway, semibold, 14,All caps	Margin top:32dp	#6200EE	7dp	User can edit his information by clicking this button.
5	Sign-Out Button	Contained Button	Auto	Auto	Raleway, semibold, 14,All caps	Centered/ 8dp top & bottom	#EE0000	7dp	User can sign-out from his account by clicking this button.
6	Back Button	Icon	24dp	24dp	-	8dp right	000000	-	User can navigate back to the previous screen.

User Info. Screen (Sign-out Alert)

❖ **Purpose:** Confirm that the user really wants to log out and this prevent accidental sign-outs.
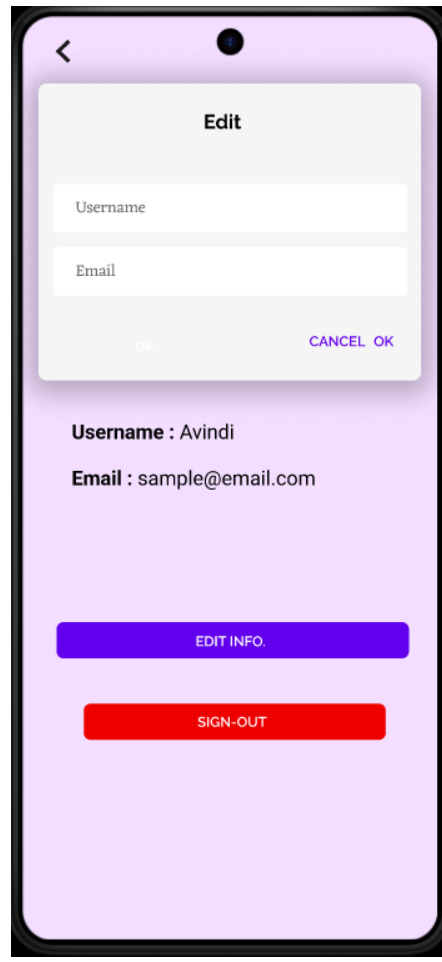
❖ Components:

1. Sign-Out Dialog box(Container)
2. Confirmation Text(Sign-Out?)
3. Supporting Text
4. Dismiss button
5. Confirm button
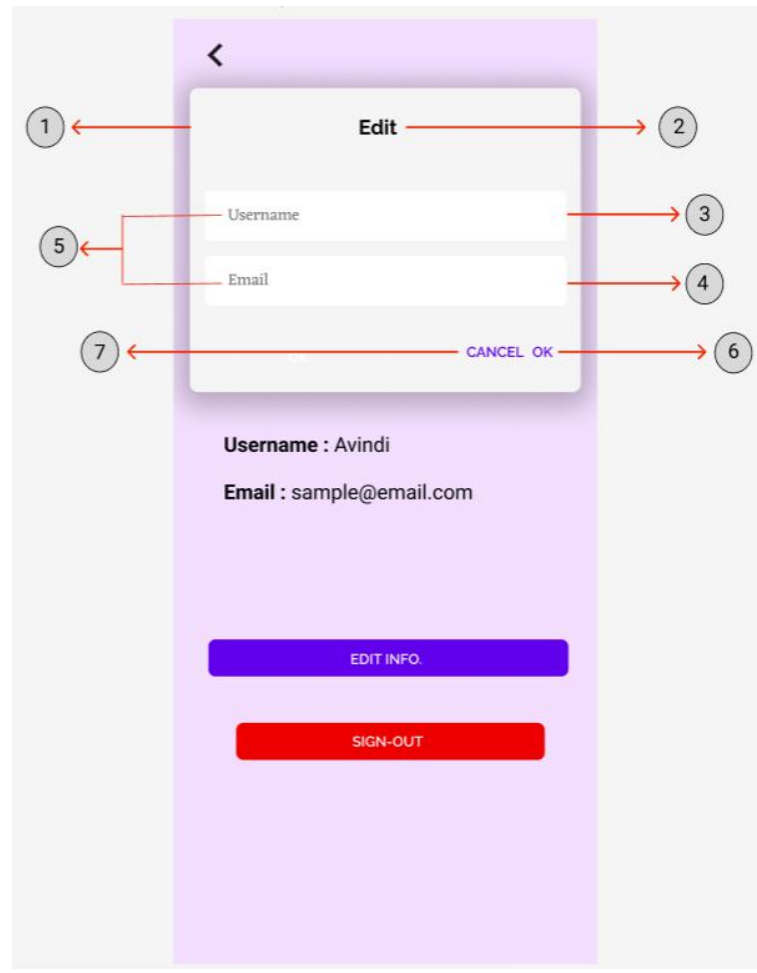
❖ Design Guidelines Table:

#	Component	Type	Width	Height	Typeface / Font/ Size/ Case	Padding/ Margin	Color	Corner Radius	Description
1	Sign-Out Dialog box (Container)	Alert dialog box	280dp	200dp		Centered	#F5F5F5	8dp	This ask from user whether he really want to sign-out. If yes,user can click confirm button if not user can click Dismiss button.
2	Confirmatio-n Text (Sign-out?)	Text	Auto	Auto	Raleway, Bold,20, Title caps	Centered, 8dp below	000000	-	This communicate the dialog purpose
3	Supporting Text	Text	Auto	Auto	Raleway, medium, 20, Title caps	Centered, 8dp Top & below	000000	-	This contain small description about confirmation text.
4	Dismiss button	Text Button	Auto	Auto	Raleway, semibold, 14,All caps	32dp top	#6200EE	-	If user don't want to sign-out then he should click the dismiss button.
5	Confirm button	Text Button	Auto	Auto	Raleway, semibold, 14,All caps	Centered/ 8dp top & bottom	#6200EE	-	If user want to sign-out then he should click the confirm button.

User info. screen(Edit Info Alert)

❖ **Purpose:** Let the user know they are about to edit their profile information and confirm their action.

❖ Components:

1. Edit Info Dialog Box
2. Dialog Title(Edit)
3. Username Text Field
4. Email Text Field
5. Text Field Labels(Username,Email)
6. OK Button
7. CANCEL Button

❖ Design Guidelines Table:

#	Component	Type	Width	Height	Typeface / Font/ Size/ Case	Padding/ Margin	Color	Corner Radius	Description
1	Edit Info Dialog Box	Dialog box	380dp	295dp	-	Centered	#F5F5F5	8dp	This dialog box pop-up when user click on the edit info. button .
2	Dialog Title (Edit)	Text	Auto	Auto	Raleway, Bold,20, Title case	Centered, 8dp below	000000	-	Normally this communicate the purpose of dialog box.
3	Username Text Field	Text Field (Filled Text Field)	350dp	48dp	-	Centered, 8dp Top & below	#FFFFFF	4dp	Get username as input .
4	Email Text Field	Text Field (Filled Text Field)	350dp	48dp	-	32dp top	#FFFFFF	4dp	Get Email as input.
5	Text Field Labels(User name,Email)	Text	Auto	Auto	Esczar, Regular, 16, Title case	Centered/ 8dp top & bottom	#6F6A6A	-	This communicate the purpose of each text fields.
6	OK Button	Text Button	Auto	Auto	Raleway, semibold, 14, All caps	Top margin:24 dp , Padding:8 dp	#6200EE	-	If user want to edit his info. After filling text fields, then he can click on ok button.
7	CANCEL Button	Text Button	Auto	Auto	Raleway, semibold, 14, All caps	Margin left:8dp , Padding:8 dp	#6200EE	-	If user don't want to edit his info. then he can click on cancel button.

More padding and marging informations for each and every screens

- Margin from screen edge: 16dp
- Spacing between form elements: 8dp–24dp
- Padding inside buttons or fields: 12dp–16dp

1.Login Screen

Elements:
- Logo Image
  - Margin Top: 64dp (from screen top)
  - Margin Bottom: 32dp
- Username Field
  - Margin Top: 0dp
  - Margin Horizontal: 16dp
  - Padding Inside: 12dp
- Password Field
  - Margin Top: 16dp
  - Margin Horizontal: 16dp
  - Padding Inside: 12dp
- Login Button
  - Margin Top: 24dp
  - Margin Horizontal: 16dp
  - Padding Inside: 12dp vertical, 16dp horizontal
- "Don't have an account?" Link
  - Margin Top: 16dp
  - Margin Bottom: 32dp

2. Sign-up Screen

Elements:
- Username, Password, Confirm Password, Email Fields
  - Each Field Margin Top: 16dp
  - Margin Horizontal: 16dp
  - Padding Inside: 12dp
- Sign-up Button
  - Margin Top: 24dp
  - Padding: 12dp vertical, 16dp horizontal
- "Already have an account?" Link
  - Margin Top: 16dp

   o Margin Bottom: 32dp

3. Home/Feed Screen

  Elements:
- Top bar ("Hi Avindi", Search)
  - Margin Top: 24dp
  - Margin Horizontal: 16dp
  - Element Spacing: 8dp
- Cards (Events/News Feed)
  - Margin Top: 16dp
  - Padding: 16dp
  - Spacing Between Cards: 16dp
- Bottom Nav Bar
  - Height: 56dp
  - Padding Inside: 8dp
  - Padding Bottom (safe area): 16dp

4. Developer Information Screen

  Elements:
- Profile Image
  - Margin Top: 48dp
  - Margin Bottom: 24dp
- Name, Student No., Statement
  - Spacing Between Lines: 8dp
- "Exit" Button
  - Margin Top: 32dp
  - Padding Inside: 12dp vertical, 16dp horizontal

5. User Information Screen

  Elements:
- Profile Photo
  - Margin Top: 48dp

- Username / Email Labels
  - Spacing Between: 8dp
  - Margin Bottom: 24dp
- Edit Info / Sign-out Buttons
  - Margin Top: 16dp
  - Padding: 12dp vertical, 16dp horizontal

6. Edit Alert Popup

- Padding Inside Dialog: 24dp
- Spacing between text & buttons: 16dp
- Padding inside buttons: 8dp vertical, 16dp horizontal

7. Sign-out Alert Dialog

- Same as above (Material Dialog default):
  - Padding: 24dp all sides
  - Spacing between elements: 16dp
  - Button Row Padding: 8dp top, 0dp bottom

8. Convocation Detail Screen

Elements:
- Back Arrow
  - Margin Top: 16dp, Left: 16dp
- Image
  - Margin Top: 24dp
- Heading + Subheading
  - Margin Top: 16dp
  - Padding Horizontal: 16dp
- Paragraph Text
  - Margin Top: 16dp
  - Padding Horizontal: 16dp
  - Line Spacing: 4dp

5. Prototyping and Motion

- ❖ **Button Feedback:** Buttons provide ripple and scaling effects to show tap response.

6. Tools Used

The following tools were used throughout the design and prototyping process:

- ❖ **Figma** – For UI design, wireframing, layout composition, and prototyping.

- ❖ **Google Material Icons Library** – To maintain consistency with MD3 iconography .

- ❖ **Material Design Kit (Figma)** - For access to pre-built MD3 components, ensuring faster design development and adherence to Material Design guidelines.

7. Conclusion

The "FoT Alerts" mobile application's user interface was designed by following Google's Material Design principles to ensure clarity, usability, and aesthetic consistency. The app provides an engaging user experience for students to stay updated on the latest news and events.