



SUBJECT AND LEVEL	ADVANCED DEVELOPMENT SOFTWARE		
SUBJECT CODE			
DATE	04 June 2022		
VENUE	D LABS	NUMBER OF PAGES (including cover page)	5
TIME	09H00	DURATION	3HRS
FULL MARKS	100	TOTAL MARKS	50

EXAMINERS	N.F. NJAPHA
MODERATOR	V. JUGOO

FACULTY	NATURAL SCIENCES
DEPARTMENT	INFORMATION AND COMMUNICATION TECHNOLOGY
QUALIFICATION	DIPLOMA: SOFTWARE DEVELOPMENT

DO NOT TURN OVER UNTIL PERMISSION IS GIVEN BY THE MAIN INVIGILATOR.

INSTRUCTIONS

- Fill in the mark sheet with your student details.
- Leave your application and firebase opened for marking.
- You are allowed to access www.ionicframework.com and <https://ionic.io/ionicons> for ionic components and ionic icons.
- All error messages and messages must be displayed in a toast.
- All files needed to complete the test are available on blackboard under the (Test one/support files) folder.
 - Button color
 - Logo (logo size) and
 - Toast method.

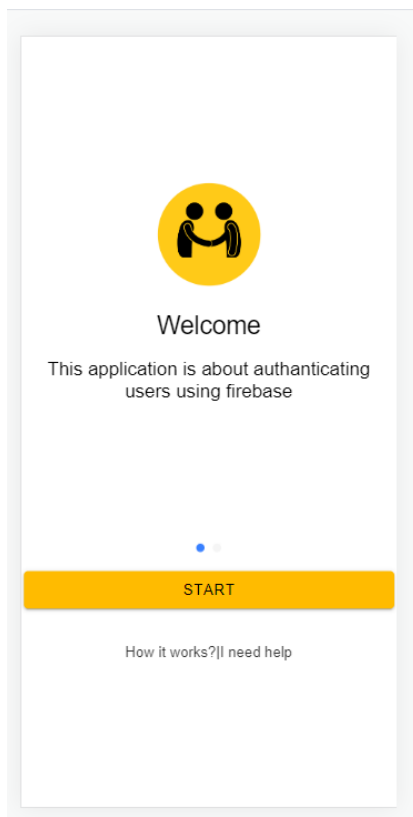
QUESTION ONE

You have been requested to create a mobile application that will authenticate users using their email address and password. Use firebase for authentication.

Welcome page

[Total: 5 Marks]

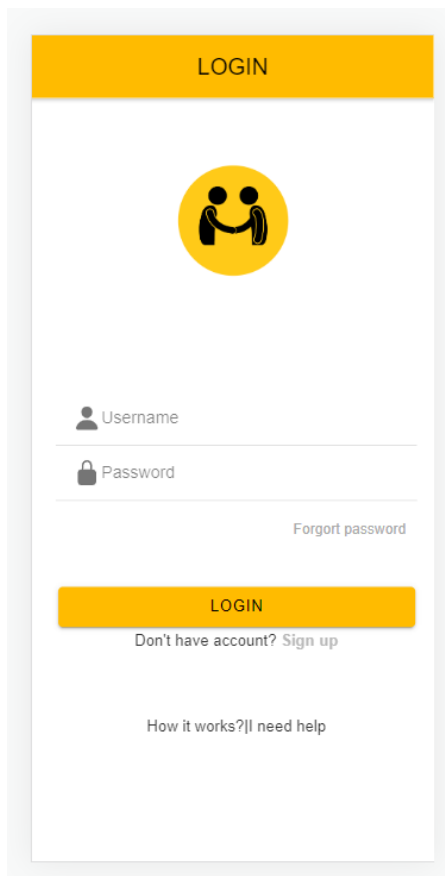
Navigate to the **login page** when the start button is clicked. You can either use a slide or a simple welcome page.



Login page

[Total: 15 Marks]

- Login using the email address and password credentials stored on firebase.
- Display an appropriate error message if no values have been entered or if values entered do not exist.
- Display an appropriate error message if the user has not verified their email address.
- If the user has entered correct details, display the message **“You have successfully logged in”**.
- Navigate to the appropriate pages when other links are clicked.

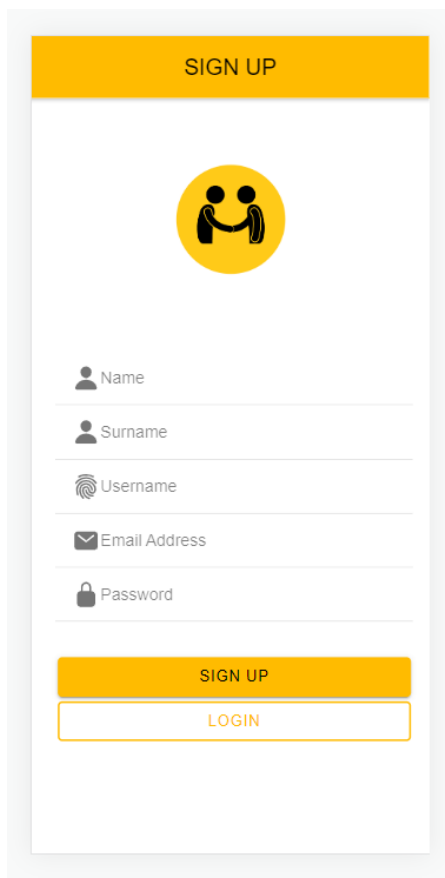


The image shows a mobile app login screen. At the top is a yellow header with the word "LOGIN" in white. Below the header is a large yellow circle containing a black icon of two people shaking hands. Underneath the icon are two input fields: the first is labeled "Username" with a person icon, and the second is labeled "Password" with a lock icon. To the right of the password field is a link that says "Forgot password". Below these fields is a yellow "LOGIN" button. Under the button is a link that says "Don't have account? Sign up". At the bottom of the screen is a link that says "How it works?|I need help".

Signup page

[Total: 15 Marks]

- Save and authenticate the email and password using firebase.
- **Name, Surname** and **Username** are not to be validated or saved. They are there for design purposes.
- Display an appropriate error message if email address and password have not been entered.
- Send a verification email message to a successfully registered user.
- Ensure that the user enters both email and password.
- Display an appropriate error message if both email address and password have not been entered.




The image shows a mobile app signup page. At the top is a yellow header with the text "SIGN UP". Below the header is a large yellow circle containing a black icon of two people shaking hands. Underneath the icon are five input fields, each with a small icon to its left: a person icon for "Name", a person icon for "Surname", a fingerprint icon for "Username", an envelope icon for "Email Address", and a padlock icon for "Password". Below these fields are two buttons: a yellow button with the text "SIGN UP" and a white button with a yellow border and the text "LOGIN".

Forgot password page


[Total: 10 Marks]

- Send an email link for the user to change their password.
- Display an appropriate error message if the email address does not exist.
- Display an appropriate error message if email address has not been entered.

FORGOT PASSWORD



Please enter your email address below. A link will be sent to change your password.

 Email Address

SEND

LOGIN

[How it works? | I need help](#)

Overall: 5 Marks

TOTAL: 50 Marks