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**COURSE: CLOUD AND MOBILE COMPUTING**

**PUIT/23130002**

# Student Registration System Documentation

# Overview

The Student Registration System is a mobile application developed using Flutter. It allows students to sign up, log in, and manage their profiles, including updating personal information and changing passwords. Additionally, students can register for courses offered by the institution. The app is integrated with Firebase for authentication and Firestore for managing course registrations.

# Setup Instructions

## Prerequisites

Before you begin, ensure you have the following installed:

* Flutter SDK
* Dart SDK
* Android Studio or Xcode (depending on the platform you're targeting)
* Firebase account

## Installation

1. **Clone the repository:**

git clone /C-Note60/MYAPP.git

1. **Navigate to the project directory:**

cd MYAPP

1. **Install dependencies:**

flutter pub get

# Firebase Configuration

1. Create a Firebase project in the Firebase Console.
2. Add your Android and/or iOS app to the Firebase project.
3. Download the google-services.json file for Android and/or GoogleService-Info.plist for iOS.
4. Place the google-services.json file in the android/app directory.
5. Place the GoogleService-Info.plist file in the ios/Runner directory.
6. Follow any additional setup instructions provided by Firebase.

## Running the App

To run the app on an emulator or physical device:

flutter run

# Features and Usage

## Authentication

* **Sign Up:** Users can create a new account using their email and password.
* **Login:** Users can log in with their credentials to access their profiles and registered courses.
* **Logout:** Users can securely log out of their accounts.

## Profile Management

* **View Profile:** Users can view their personal details, including their email and display name.
* **Edit Profile:** Users can update their display name and email address.
* **Change Password:** Users can change their password by entering their current and new passwords.

## Course Registration

* **Select Course:** Users can browse a list of available courses.
* **Register:** Users can register for selected courses. Registered courses are saved in Firestore.

# Testing

## Unit Tests

Unit tests are implemented to ensure the functionality of individual components in the app, such as authentication and profile management.

## Integration Tests

Integration tests are conducted to verify that different modules work together as expected, such as logging in and registering for a course.

To run the tests, use the following command:

flutter test

# License

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