College of Informatics and Computing Sciences

IT 331 – Application Development and Emerging Technologies

Mobile Application Development

Project Title:

DOCUEASE PORTAL

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Project Overview

The **DocuEase Portal** is a mobile application inspired by and connected to our main capstone project, the web-based system called *DocuEase: Online Document Processing System for Padre Garcia's Local Civil Registrar's Office*. The main goal of this project is to improve how civil documents such as **birth certificates**, **marriage certificates**, and **death certificates** are requested and processed by replacing the traditional manual process with a digital platform. In the past, citizens were required to personally visit the Local Civil Registrar's Office to fill out forms, submit requirements, and return multiple times to check the status or claim their documents. This method was slow, inconvenient, and time-consuming for both the public and the office staff. The **DocuEase** system addresses these issues by offering a more organized, faster, and easier way to handle document requests.

In the past, requesting documents required multiple visits to the office, long waiting times, and manual processing. The mobile app addresses these problems by allowing users to submit document requests, track their status, view a partial receipt, and check service requirements directly from their phones. While the web version includes full features, the app focuses on the most essential functions that suit a mobile format.

The **DocuEase Portal** improves public service by making the process faster, more organized, and more convenient for both users and staff. It supports digital transformation by providing a simple yet effective tool that helps bring local government services closer to the people.

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PHASE 1: DESIGN

Sign in/Sign up Page   **Main and Requesting Page**

PHASE 2: DEVELOPMENT

Alpha Version:

NOTE: The provided screenshots represent the pages that are currently functioning on both the front-end and back-end. As of now, these are the only sections of the system that are fully operational. Furthermore, the design is not yet finalized as we focus on how it works for both front and back end and development is ongoing for the remaining pages and functionalities.

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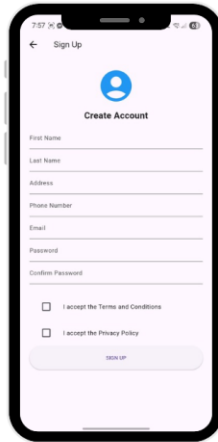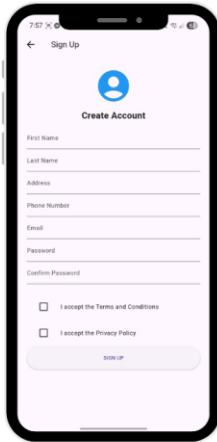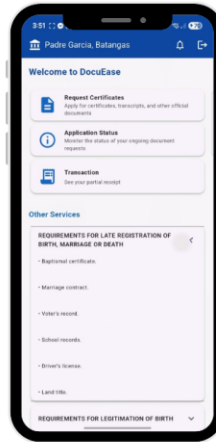
| Sign in | Sign up | Main Dashboard | Request Page | Other Services (Dropdown) |
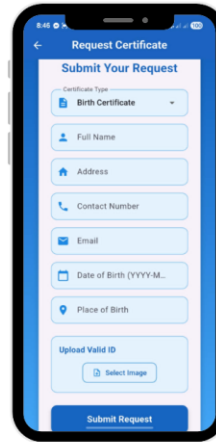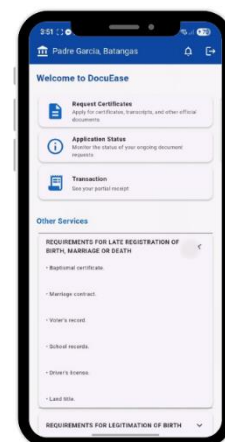
PHASE 3: TESTING

OUTPUT 1: Bug Report Sheet

Test Case	Expected Result	Actual Result	Status
Terms & Conditions content visibility	Terms and Conditions page displays privacy info and disclaimers	Content is now visible and complete	Resolved
Password eye icon toggle	Eye icon toggles visibility of password input	Toggle works as intended	Resolved
Request limit per user/day	User is limited to 2 requests per day	Limit is enforced properly	Resolved

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Account creation validation	User must input valid email in creating their account.	Email OTP are working.	Resolved

OUTPUT 2: Testing Logs/Checklist

Feature/Module	Description	Status
Navigation (Home → Request Form)	User can smoothly navigate through pages with proper handling of validation	Passed
Document Request Form	Users can submit requests and upload valid ID properly but ensure that they allow permission to access their album.	Passed
Sign in and Account Registration	Users can log in using valid credentials; errors shown for invalid input. In registration the user must input valid data and complete the input fields.	Passed
Forgot Password Flow	Directs users to the live web page; input matches local.	Resolved
Request Limit Logic	System limits user to 2 requests per day	Resolved
Terms and Condition Page & Privacy Concerns	Content is now present and visible on registration module.	Resolved

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Other Services Display	Additional services (e.g., requirements for other documents) are visible on the main page.	Passed

PHASE 4: Deployment

BETA VERSION:

Sign In and Sign Up   **Terms & Condition and Privacy Concerns**

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Main Page   **Request Form Page**
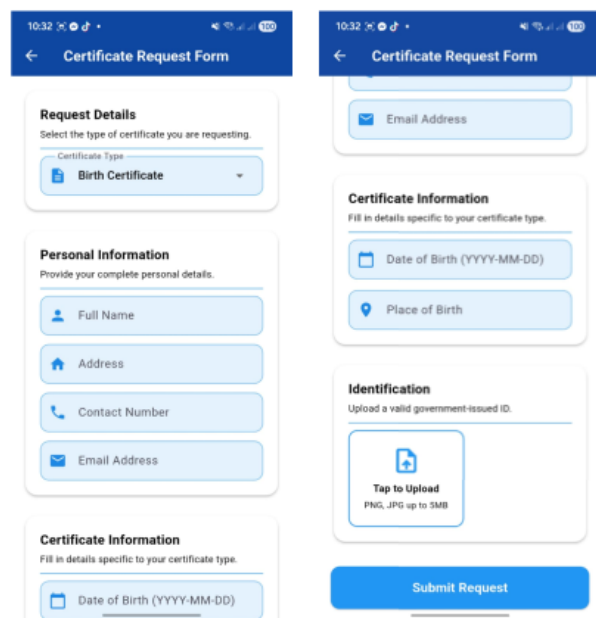
App Name & Version

App Icon:

- **App Name:** DocuEase Portal
- **Build Date:** July 29, 2025

Key Features Included:

- **Sign Up:** Register a new account using a valid credentials and send OTP verification.

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- **Sign In**: Log in securely using your registered email and password (password is encrypted for protection).

- **Access Main Page:** View the main dashboard after login

PHASE 5: Maintenance

OUTPUT 1: Version History/Change Logs

Version	Release Date	Update/Changes
v1.0 Beta	2025-07-23	Initial release with core features (registration, request form)
v1.0.1	2025-07-25	Bug fixes (terms content, eye icon, request limits, validation logic)
v1.0.2	2025-07-30	UI improvements, added "Other Services," integrated Forgot Password live link
Other Beta Versions	To Follow	Enhancements or LGU expansion modules (pending development and testing)

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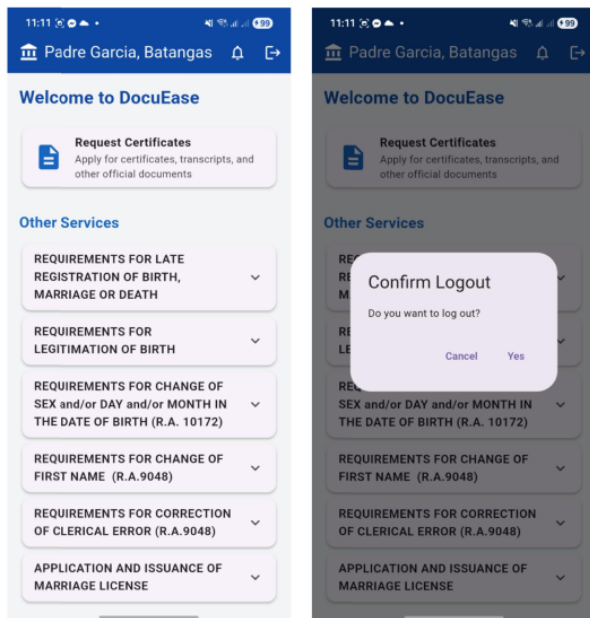**A. Tanco Drive, Brgy. Marawoy, Lipa, Batangas, Philippines 4217**
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OUTPUT 2: Maintenance Plan

As of now, the *DocuEase* mobile application has the same working features as the web version. Only the parts that are already functioning on the web are also available on mobile. The backend for both versions is still being developed and will be launched at the same time to make sure everything works smoothly together.

Once the full system is ready, the team will regularly maintain both the web and mobile apps. They will collect and review user feedback to find any issues or improvements. If bugs are found or users report problems, updates and fixes will be applied as soon as possible.

The app will also be checked to make sure it works with the latest Android and iOS updates. Performance, such as loading speed and responsiveness, will be monitored and improved when needed. Future versions may include added features based on the needs of the users and local government.

This maintenance plan helps make sure that *DocuEase* remains reliable, user-friendly, and helpful for people requesting official documents.

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System Requirements

Functional Requirements

These requirements define the specific behavior and functionality that the DocuEase system must support.

1.1 User Account and Authentication

- The system shall allow users to register using a valid email address, contact number, and password.

- The system shall validate input formats (e.g., proper email, 11-digit contact number).

- The system shall allow users to log in with their credentials.

- The system shall include a forgot password feature that direct to the actual website and if the email and contact number match an existing user in the database it will proceed in resetting their password.

1.2 Document Request Management

- The system shall allow users to request civil documents such as birth, marriage, and death certificates.

- The system shall include fields for required information based on the type of certificate.

- The system shall require users to upload a valid government-issued ID as part of the request.

- The system shall limit users to 2 requests per day to prevent spamming or system abuse.

1.3 File Upload and Validation

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- The system shall allow uploads in JPG, or PNG formats.

- The user must grant permission before the system access their album.

1.4 Request Tracking *(Pending)*

- The system shall allow users to track the status of their requests.

- The system shall show statuses such as *Submitted*, *In Review*, *Approved*, *Rejected*, or *Released*.

1.5 Other Services and Content Display

- The system shall display Other Services offered by the LCRO on the home page.

- The system shall provide access to Terms and Conditions and Privacy Policy.

- The system shall include a password visibility toggle icon in the login and registration forms.

Non-Functional Requirements

These requirements define system performance, reliability, and quality attributes necessary for effective operation.

2.1 Performance Requirements

- The app shall load primary screens within 3 seconds under a stable internet connection.
- Document request submissions and OTP verification shall be properly processed

2.2 Security Requirements

- User passwords shall be securely hashed before storage in the database.

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- The reset password shall only proceed after verifying matching email and contact number.

- Input validations shall be implemented to prevent SQL injection and cross-site scripting (XSS).

- In creating account, the user must input valid email address to verify and send OTP validation.

2.3 Compatibility

- The application shall support Android 9.0 (Pie) and higher.

- It shall operate smoothly on devices with at least 2GB RAM.

2.4 Availability and Reliability

- The system shall display a notification when internet connectivity is unavailable.

- If SMS delivery fails due to network issues, the system shall attempt automatic retries (up to 3 times).

2.5 Data Privacy and Compliance

- All personal data and ID uploads shall be encrypted during storage and transmission.

- The system shall comply with the Philippines' Data Privacy Act and other relevant regulations.

2.6 Maintainability

- The system shall follow a modular code structure to facilitate easy updates and bug fixes.

- A version history and changelog shall be maintained for all releases.

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2.7 Usability

- The app shall provide a user-friendly interface that is intuitive for both tech-savvy and general users.

- Icons and label messages shall be clear and understandable.