Loan App

TECHNICAL DESIGN DOCUMENT

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# SECTION 1: INTRODUCTION

## Purpose

*The purpose of this web application is to show an about page and contact information page and to allow customers to view loan applications they might have as well as payment options.*

## Terminology

|  |  |
| --- | --- |
| **Name** | **Comments** |
| *MEAN Stack* | *MongoDB, Express, Angular, and Node.js* |
| *VS Code* | *Development IDE* |
| *SoapUI* | *API testing tool* |
| *MongoDB Compass* | *Database development IDE* |
| *Angular Material* | [*https://material.angular.io/*](https://material.angular.io/) |
| *Flex-layout* | [*https://github.com/angular/flex-layout*](https://github.com/angular/flex-layout) |

## User Personas

A cartoon of a person with big eyes

Description automatically generated

*Name: Anitha Gibson*

*Age: 25*

*Role: Recent graduate*

*Characteristics: determined, fair, reliable, impatient, obnoxious*

*Features used: To use the loan calculator application to see how much is owed to better balance their monthly payments.*

*Features less used: Contact page*

*Needs: Clear, simple, to the point web application*

*Cartoon a cartoon of a person

Description automatically generated*

*Name: Leory Alchemy*

*Age: 64*

*Role: Home owner*

*Characteristics: persistent, sociable, finicky, rigid*

*Features used: To use the loan calculator application to see how far into their loan they are and how much is needed. Contact page will be used.*

*Features less used: About page*

*Needs: Easily accessible contact information.*

*A cartoon of a person wearing glasses

Description automatically generated*

*Name: Ferthop Reluig*

*Age: 36*

*Role: Loan provider*

*Characteristics: indecisive, forgetful, argumentative, precise, confident*

*Features used: To use the loan calculator application to communicate with those that have questions about their loans.*

*Features less used: calculator page.*

*Needs: Straight forward web application.*

## User Stories

*User Story 1:*

*A. As a user, I would like an easy web application so that I can find everything easier.*

*B. As a user, I would like for the web application to be concise so that I can use it from anywhere.*

*C. As a recent graduate, I would like a web application to be able to calculate the interest on my loans so that I can see how much interest I have.*

*User Story 2:*

1. *As a long time home-owner, I would like a clear contact page so that I can easily reach the loan provider when I have questions.*
2. *As a long time home-owner, I would like a simple interface so that I can access the tools I need quickly.*
3. *As a user, I would like the contact page to be simple so that I can contact the loan provider in an emergency.*

*User Story 3:*

1. *As a loan provider, I would like an easy to use interface, so that I can contact people back about their loans.*
2. *As a loan provider, I would like the web application to be simple so that individuals can find the information they need quickly.*
3. *As a loan provider, I would like the loan calculator to be user friendly, so that anyone can have access to it.*

## Time Estimations

|  |  |  |  |
| --- | --- | --- | --- |
| User Story | Importance | Story Points | Time estimation (Hrs) |
| 1A | 1 | 4 | 5 |
| 1B | 3 | 3 | 3 |
| 1C | 2 | 2 | 2 |
| 2A | 1 | 3 | 3 |
| 2B | 1 | 3 | 3 |
| 2C | 1 | 4 | 5 |
| 3A | 3 | 3 | 3 |
| 3B | 2 | 4 | 2 |
| 3C | 3 | 2 | 2 |

# SECTION 2: PROCESS DESIGN

## 2.1. Prototypes A yellow background with white text Description automatically generated A group of colored squares with numbers Description automatically generated

homepage

*A screenshot of a computer

Description automatically generated* *A screenshot of a computer

Description automatically generated* A screenshot of a green screen

Description automatically generated A screenshot of a computer

Description automatically generated A screenshot of a computer

Description automatically generated

## 2.2. ORD (Object Relational Diagram(s)

*A diagram of a diagram

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## 2.3. NoSQL Document Diagram

*[Covert the above ORD into a NoSQL Document Diagram]*

## 2.4. NoSQL Data Structure

*[Covert the above NoSQL Document Diagram into a NoSQL Data Structure (JSON data)]*

# SECTION 3: QA TESTING

## 3.1. QA Test Plan

*[Weekly Test Cases]*

## 3.2. Unit Tests

*[Images of SoapUI Unit Tests]*

# SECTION 4: REFERENCES

*[APA Reference List]*