Loan\_App

TECHNICAL DESIGN DOCUMENT

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| **Author** | William Watlington |
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# SECTION 1: INTRODUCTION

## Purpose

Loan\_App will be a free online loan calculator that estimates monthly payment and interest for annually calculated simple loans.

## 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/> |
| Flex-layout | <https://github.com/angular/flex-layout> |

## User Personas

Joe Loanman

* Age: 18-30
* Goals: Quickly check what auto loan they can afford with a maximum monthly payment in mind
* Digital Literacy: Above average
* Gains Information by: Online reading, Video
* Challenges: Finding the answers they are looking for in the fastest way possible with as few steps as possible.

Brandon Weir

* Age: 45-60
* Goals: Easily estimate interest in a potential future mortgage.
* Digital Literacy: Below Average
* Gains Information by: Being taught in person, reading books
* Challenges: Navigating an online tool/web app with minimal difficulty, gets frustrated easily with digital tools.

Ruth Moore

* Age: 35-45
* Goals: Estimate how much interest they will pay on their student loans.
* Digital Literacy: Average
* Gains Information By: Reading, watching television
* Challenges: May have issues using web apps that behave differently than they expect based on other similar apps they’ve used

## User Stories

|  |  |  |
| --- | --- | --- |
| User | Story | Work Effort (fibonnaci) |
| Joe Loanman | As a user, I want to input data and receive results immediately so that I can return to other things. | 8 |
|  | As a user, I have used other web calculators before and expect a certain layout so that I can easily navigate the app. | 13 |
|  | As a user, I expect to be able to screenshot the results so that I can easily view it later. | 3 |
| Brandon Weir | As a user, I want simple instructions to be easily viewable so that I can use the app correctly. | 5 |
|  | As a user, I want explanations for any technical terminology I may encounter in an app. | 1 |
|  | As a user, I want to be able to easily read the results of the calculator without confusion. | 8 |
| Ruth Moore | As a user, I want the calculator to be formatted similarly to other web calculators I’ve used, so that I won’t need to read the instructions. | 21 |
|  | As a user, I want to be able to see the formula being used to calculate my loan so that I know it’s the correct type of calculator for my needs. | 2 |
|  | As a user, I want the data I’m entering to be clearly labeled so that I know I am entering the information correctly. | 1 |

## Time Estimations

* Formatting
  + 4 hours
* Calculation/Output
  + 8 hours
* Styling
  + 2 hours
* Instructions/Labels
  + 2 hours

# SECTION 2: PROCESS DESIGN

## 2.1. Prototypes





