## Capstone II: Project Proposal - Marveleyes Online Appointment Booking Application

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## 1.0 Project Overview

Section	Description		
Tech Stack	What tech stack will you use for your final project? It is recommended to use the following technologies in this project: Python/Flask, PostgreSQL, SQLAlchemy, Heroku, Jinja, RESTful APIs, JavaScript, HTML, CSS. Depending on your idea, you might end up using WTForms and other technologies discussed in the course.	Front End:  ReactJS  HTML CSS  Back End: Node.js Express DB: PostgreSQL	
Туре	Will this be a website? A mobile app? Something else?	This will be a browser application with equal emphasis on both front and back end.	
Goal	What goal will your project be designed to achieve?	The goal of this project is to create an application that will allow clients of an existing permanent makeup business to book appointments directly through the app which will notify and update the schedule of the business owner.	
Users	What kind of users will visit your app? In other words, what is the demographic of your users?	<ul> <li>Adults (Typically Female)</li> <li>Tech savvy - these clients are marketed to through either instagram or google ads</li> <li>Typical age range: mid 20s - mid 40s</li> </ul>	
Data	What data do you plan on using? How are you planning on collecting your data? You may have not picked your actual API yet, which is fine, just outline what kind of data you would like it to contain. You are welcome to create your own API and populate it with data. If you are using a	Appointment Data      User input  User Data      User Input	

	Python/Flask stack, you are required to create your own API.	Service Details and Pricing
		Stakeholder input
		Scheduling
		Write to Google Calendar API

## 2.0 Project Breakdown

Task Name	Description
Define User Requirements	Determine the scope of actions that will be fulfilled by the user and the application in order to achieve the goal listed in section 1.0.
Design Database schema	Determine the models and database schema required for your project.
Source Data	Determine where your data will come from. You may choose to use an existing API or create your own.
User Flows	Determine user flow(s) - think about what you want a user's experience to be like as they navigate your site.
Set up backend and database	Configure the environmental variables on your framework of choice for development and setup database.
Seed database with test data	Pre-populate database tables with test records in order to conduct preliminary tests
Set up frontend	Set up the front-end framework of choice and link it to the backend with a simple API call.

User Authentication	Fullstack feature - ability to authenticate (login and sign up) as a user	
Set up test cases	Set up test cases for happy path operations for each User Flow	
Unit Testing - Run Unit Test Scripts	Run test scripts to ensure key units are working	
Integration Testing	Combination of scripted tests and manual testing	
Run exploratory tests	Test some corner cases to ensure application can handle less common user behaviour	
Fix Bugs	Prioritize bugs based on severity and fix all showstoppers and "critical" bugs first.	
Deploy	Deploy code via Render to production environment.	
Create README	Document details of the application in a .md file	

## 3.0 User Requirements

Req#	Description	Priority
1	Clients must be able to browser from a list of available services	
2	Clients must be able to select a service to view the available time slots	
3	Clients must be able to select an available time slot and reserve the service	
4	List of available time slots must be updated once a user has selected a time to book	
5	Once client books an appointment, appointment details must be saved to the database	
6	Client must have the option of inputting a note when booking an appointment so they can share any additional info that they feel the business owner should know prior to the appointment.	