

## **Assignment 1**

### **1. Initial Thoughts (2 points)**

Who are the main users of the system?

- People seeking services and administrators who need tools to organize their incoming appointments

How will users and administrators interact with the application?

- Users will be able to book services, and join queues and leave when needed.
- Administrators will be able to mark off which appointments have been completed and view the current queue in order to keep track of the days appointments.

What are the most important features?

- Users are able to book, cancel, or reschedule appointments and receive automated email notifications
- Being able to view basic usage statistics, like how many appointments were done in a day
- Email and/or text notifications when it is someone's turn in the queue

What challenges do you anticipate (e.g., long queues, notifications, inaccurate wait times)?

- Keeping data updated so everyone is able to see the current queue status
- Estimating wait times

### **2. Development Methodology (2 points)**

Which methodology will you follow (e.g., Agile, Scrum, Waterfall)?

- We are using Agile methodology with a simple Scrum approach because it supports working in small steps.

Why is this methodology appropriate for this project?

- Agile is appropriate since the project is divided into multiple assignments and requires updates and improvement as we go through it.

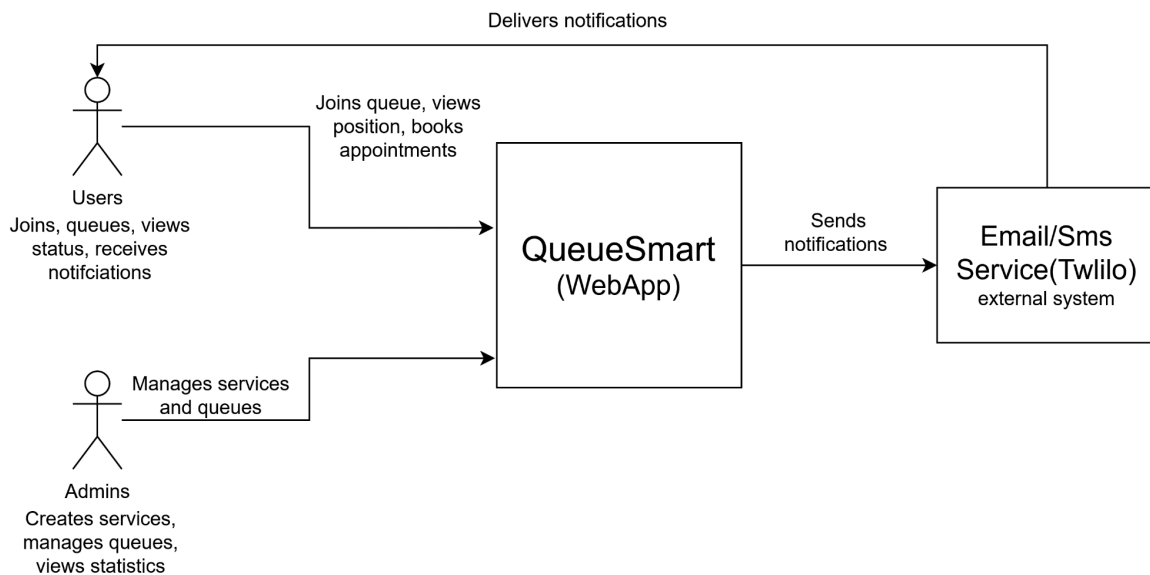
How will this approach help your team work across multiple assignments?

- This method helps our team stay organized, divide tasks clearly, and keep the work consistent across Assignment 1 through the final project.

### 3. High-Level Design / Architecture (6 points)

Provide a high-level architecture of your proposed solution.

The architecture diagram



The Users and Admins interact with the QueueSmart web application through their browsers. The application processes all requests and stores the data. Administrators manage services and update the queue status. When a user's position changes or their turn is approaching, the system sends a notification through an external service (Twilio), which delivers the alert to the user.

Group Member Name	What is your contribution?	Discussion Notes
1 Cynthia Saab	Question 2	
2 Stuti Pagadala	Question 1	
3 Muberra Bingol	Question 1(Initial Thoughts)	
4 Dylan Miller	Created System Context Diagram	