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| **Barbershop App**  **Software Requirements Specification**  **Version No. 3**  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| **Barbershop App**  **Software Requirements Specification**  **Version No. 3**  **Prepared By: Inspected/Reviewed By: Approved By:**  **NAME: Paige Weber Eddie Gyger Zach Westover, Zach Jacobs**  **TITLE: Lineup BarberShop WebApp**  **SIGNATURE:**  **DATE:** 4/27/20 |

**VERSION HISTORY**

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| **Version No.** | **Date** | **Changed By:** | **Changes Made:** |
| 1 | 11/19 | Paige Weber | Began development in Build Fire |
| 2 | 1/20 | Paige Weber | Changed from Build Fire to React Native to avoid paywalls and build from scratch |
| 3 | 3/20 | Paige Weber | Changed from app to website using JS, PHP, HTML, CSS, focused on scheduling functionality |
| 3.1 | 3/31 | Zach Westover | Map page integrated/First Google Calendar Test Page |
| 3.2 | 4/2 | Eddie Gyger | Appointment Scheduling UI fully in place |
| 3.3 | 4/4 | Paige Weber | Email Notification Script finalized/Appointments page hooked up to Google API |
| 3.4 | 4/6 | Zach Westover | CSS overhaul/Products Services UI inplace |
| 3.5 | 4/17 | Eddie Gyger | Dynamic Appointment Scheduling First Time User Handling |
| 3.6 | 4/20 | Zach Jacobs | Client Requirement(Special Events) Integrated |

**Barbershop App**

**Software Requirements Specification**

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# Overview

The Software Requirements Specification (SRS) begins the translation process that converts the software requirements into the language the developers will use. The SRS draws on the use-cases from the User Requirement Document (URD) and analyzes the situations from a number of perspectives to discover and eliminate inconsistencies, ambiguities, and omissions before development progresses significantly under mistaken assumptions.

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| Problem Frame | Our website provides a platform to help barbershop customers schedule appointments, view available in-store products, pay for appointments and products through the website, review and view ratings of barbers, and earn rewards points for being a loyal customer. It provides a unique tool for barbers to view their personal schedules, request lunch breaks, and schedule appointments for customers who call into the store. |

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| References | Github: <https://github.com/PEWEBER/Barbershop>  gMail Account: [lineupbarbershoppe@gmail.com](mailto:lineupbarbershoppe@gmail.com) (password: SENGgroup5!)  goDaddy DB: <https://p3nlmysqladm002.secureserver.net/grid55/203>  (username: paigeweber, password: Bison51#) |

# Interface Requirements

This section defines the parameters that the software product must follow while interacting with the outside world.

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| User Interfaces | *The website must use formatting that is friendly to mobile users as well as different browsers. In the current version, users must be signed into the google account associated with lineupbarbershoppe@gmail.com. In the future, the google account should be changed to a more open platform that does not require users to be logged in to edit and view the calendar. Website is viewed best when the user is on a browser and full screen, not on a mobile device. Future iterations should focus on making the site mobile friendly.* |

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| Hardware Interfaces | *The website should be viewable and usable from all mobile devices and all computers regardless of the browser being used.* |

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| Software Interfaces | *This product uses the Google Calendar API to implement scheduling and calendar viewing functionality. A goDaddy database is also being used for login information in order to track the identity of the user as they use the site so the appropriate information is displayed. The website is being run on a local server using PHP v7.1.23.* |

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| CommunicationsInterfaces | *Contact Page is currently using* [*lineupbarbershoppe@gmail.com*](mailto:lineupbarbershoppe@gmail.com)*. Once form is filled out, an email will automatically be sent to the barbershop email using the built-in PHP mail function. In future iterations, the user should receive a notification that their message was successfully sent. Security needs to be improved in the form, information is hardcoded and could be compromised by malicious users. Social media links are currently not in use.* |

# Functional Requirements

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| Feature Analysis |  |

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| **System Feature** **ID:**  *1* | | **System Feature** **Name:**  *View and set appointments* |
| **Description:** | *Users can view appointment availability through a quick and easy to understand representation and schedule their appointment based on the information provided.* | |
| **Activity Diagrams, Sequence Diagrams, Class Diagrams:** | A screenshot of a cell phone  Description automatically generated | |
| **Operations:** | *View calendar – users should be able to view all barbers’ calendars and filter all calendars based on their needs without logging in*  *Create an Appointment – users should be able to add their appointment to the calendar by using the UI elements that are using Google Calendar API*  *Changes Saved – changes made to the calendar should be updated correctly in order to avoid confusing with other customers* | |

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| **System Feature** **ID:**  *2* | | **System Feature** **Name:**  *Notifications* |
| **Description:** | *This provides the user with the peace of mind that their appointment has been set and helps prevent the user from forgetting about their appointment* | |
| **Activity Diagrams, Sequence Diagrams, Class Diagrams:** |  | |
| **Operations:** | *Set appointment notification- customers should receive a notification immediately after filling out the appointment form*  *Appointment reminder notification- customer should receive a notification 12 hours before their appointment* | |

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| **System Feature** **ID:**  *3* | | **System Feature** **Name:**  *Barber views and edits their schedule* |
| **Description:** | *This provides the barber a platform to view their schedule easily and set breaks for themselves throughout the day* | |
| **Activity Diagrams, Sequence Diagrams, Class Diagrams:** | *A screenshot of a cell phone  Description automatically generated* | |
| **Operations:** | *View their schedule- barbers can view their schedule for the day, week, or month in a simple, easy to interpret format*  *Edit their schedule- barbers can add a lunch break or request other time and see it reflected on their calendar and the calendar shown to the customer* | |

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| **System Feature** **ID:**  *4* | | **System Feature** **Name:**  *Customers receive/redeem rewards* |
| **Description:** | *Customers receive rewards that can be redeemed in ways that are determined by the barbershop to promote customer loyalty* | |
| **Activity Diagrams, Sequence Diagrams, Class Diagrams:** | *A close up of a map  Description automatically generated* | |
| **Operations:** | *Receive rewards- customers should receive points for every purchase or appointment set*  *Redeem rewards- customers should be able to view their points, view what they can redeem them for, and redeem them using discount codes for online transactions.* | |

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| **System Feature** **ID:**  *5* | | **System Feature** **Name:**  *Customers view products and services* |
| **Description:** | *Customers can browse products and services in order to promote spending* | |
| **Activity Diagrams, Sequence Diagrams, Class Diagrams:** | *A close up of text on a white background  Description automatically generated* | |
| **Operations:** | *Customers can view products and services through the site* | |

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| **System Feature** **ID:**  *6* | | **System Feature** **Name:**  *In-app purchasing* |
| **Description:** | *Customers can pay for their products and services online after browsing* | |
| **Activity Diagrams, Sequence Diagrams, Class Diagrams:** |  | |
| **Operations:** | *Products- customer can add products to shopping cart and pay online*  *Services- customer can set appointment and choose to pay online*  *Rewards points should be available when purchasing in-app* | |

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| **System Feature** **ID:**  *7* | | **System Feature** **Name:**  *Contact* |
| **Description:** | *The barbershop’s contact information and social media should be easy to locate on the site* | |
| **Activity Diagrams, Sequence Diagrams, Class Diagrams:** | *A screenshot of a cell phone  Description automatically generated* | |
| **Operations:** | *Customers can view the contact page to call, email, or view social media pages of the barbershop. An email contact form is provided.* | |

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| **System Feature** **ID:**  *8* | | **System Feature** **Name:**  *Special Events* |
| **Description:** | *Customers can view special events, such as a BarberQue. Barbers can promote events.* | |
| **Activity Diagrams, Sequence Diagrams, Class Diagrams:** | *N/a* | |
| **Operations:** | *Barbers – change events being displayed on landing page to promote relevant events to customers*  *Customers – become aware of events through the site that they may not have been exposed to otherwise* | |

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| Object Analysis |  |

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| **S. No.** | **Class Name** | **Responsibility** | ***Persistent (Y / N)*** |
| 1 | Main Page | Used as the landing page for navigating to other pages | N |

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| 2 | Contact Page | Provides barbershop contact information | N |

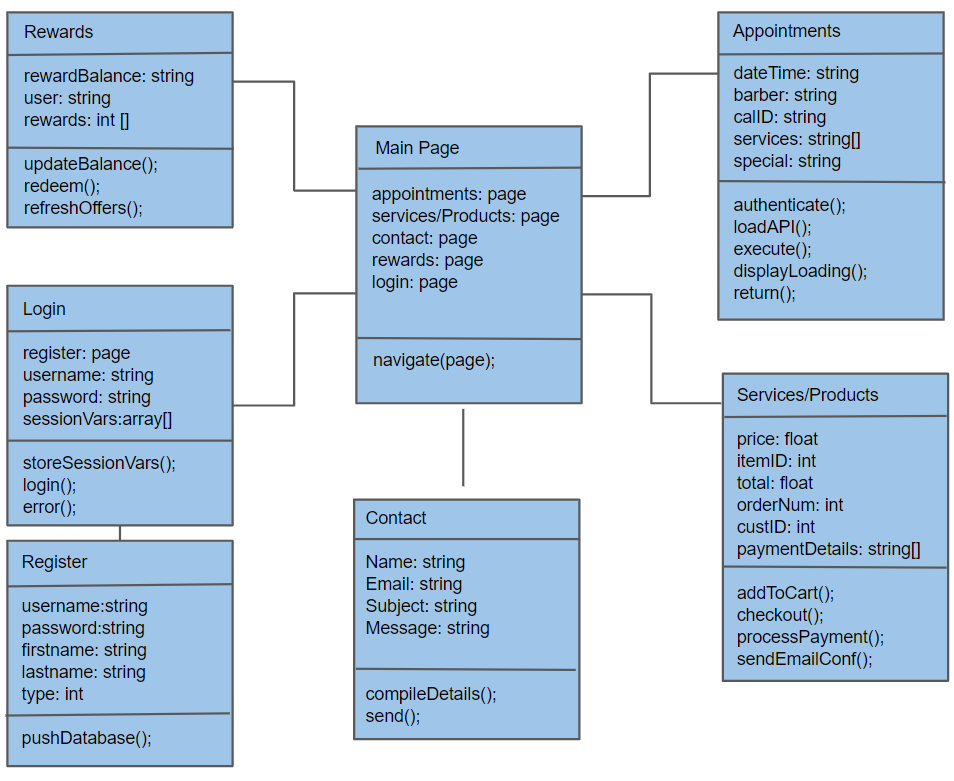
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| 3 | Rewards Page | Used to promote customer loyalty by providing customers points based on transactions made | Y (points should be stored in a database) |

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| 4 | Login | Used to pull credentials from db and start customer/barber session | Y |

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| 5 | Register | Used to create a new account/add new entry into login table in db | Y |

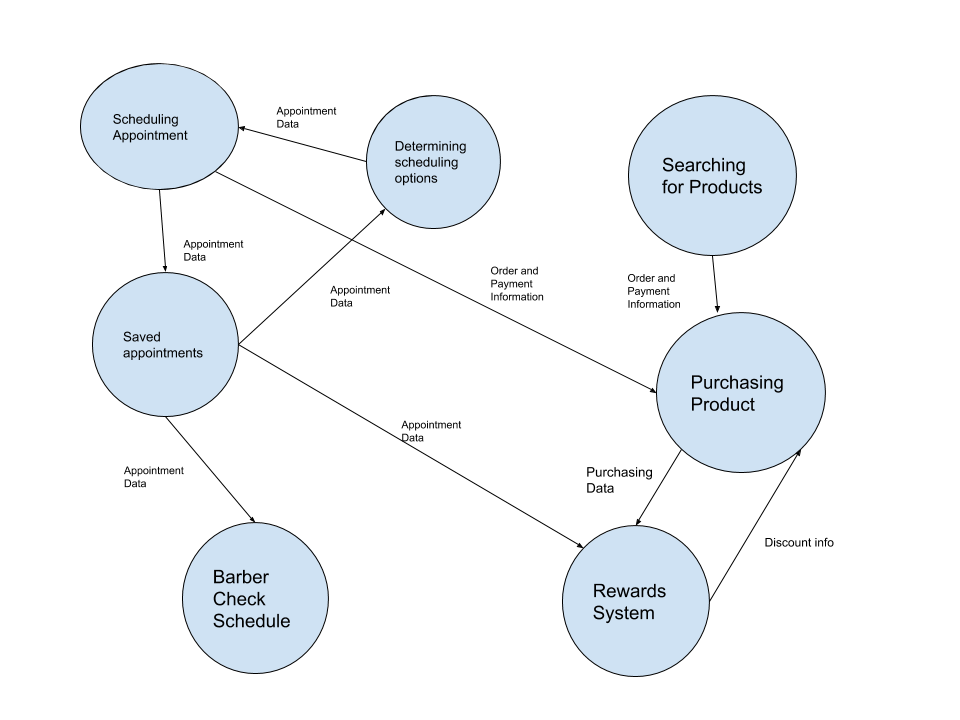
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| 6 | Appointments | Used to view and set appointments, edit calendars to display changes to all users | Y (Google Calendar API) |

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| 7 | Services/Products | Used to present services and products to clients | Y (services/products should be stored in a database) |

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| Class Analysis | *Above you can see the site as it relates to an object oriented modular design. The Main Page is the uppermost object in the site hierarchy with five child classes of custom data type “page”. In each subsequent class you can see the core attributes that make up the object as well as the functional methods that carry out the unique responsibilities of each of the sites pages.* |

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| State Analysis | *The purpose of the system as a whole is to allow customers to set up appointments, purchase products, and learn about the shop. The system also allows the barbers to see their schedule. For appointments, a customer could be determining the schedules options, the barber can be checking the schedule, appointment data needs to be transferred during this. For products a customer can either be searching for products or purchasing products, and payment information and data is transferred between states.* |

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| Formal Analysis |  |

# Nonfunctional Requirements

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| PerformanceRequirements | *The Google API is slow to load on each of the pages. This will need to be improved in future iterations if possible. The precise number of users and appointments that can be handled is unknown.* |

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| Security Requirements | *Future iterations should work to provide a secure site and login, a secure payment method, and better forms to prevent customers from booking in appointment slots that are not available in order to avoid confusion. Future iterations should find a solution for needing to be logged into the barber shops email to view the calendars. The database should be moved to AWS in order to handle more data in a more secure way that can be managed by more than one user.* |

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| Software QualityAttributes | *Google Calendar API was chosen for its ease of use and relevance in today’s world.* |