REQUIREMENTS ANALYSIS

| **Requirement ID** | **Description** | **Category** | **Priority** | **Dependencies** |
| --- | --- | --- | --- | --- |
| RQ01 | Users must be able to create an account using email and password or social login (Google, Facebook). | User Interaction | High | None |
| RQ02 | Users must be able to log in and log out securely. | User Interaction | High | RQ01 |
| RQ03 | Users must be able to update their profile details (e.g., name, contact info, profile picture). | User Interaction | Medium | RQ01, RQ02 |
| RQ04 | Users must be able to browse a catalogue of available services, categorized into men’s and women’s sections. | Data Management | High | None |
| RQ05 | Users must be able to search and filter services by name, price range, or estimated duration. | Data Management | Medium | RQ04 |
| RQ06 | Users must be able to upload a custom image under an "Others" option. | User Interaction | Medium | RQ01 |
| RQ07 | Users must be able to view service details, including estimated price, duration, and description. | Data Management | High | RQ04 |
| RQ08 | Users must be able to view available time slots for their selected service and preferred date. | System Processing | High | RQ04 |
| RQ09 | Users must be able to see a list of available barbers/stylists/nail technicians and choose one. | System Processing | High | RQ08 |
| RQ10 | Users must be able to request an appointment by selecting a service, a professional, and a time slot. | User Interaction | High | RQ08, RQ09 |
| RQ11 | The system must send the appointment request to the barbershop/salon for approval. | System Processing | High | RQ10 |
| RQ12 | Users must be notified when their appointment is approved, declined, or modified. | System Processing | High | RQ11 |
| RQ13 | Users must be able to cancel or reschedule their appointment before a set deadline. | User Interaction | Medium | RQ10 |
| RQ14 | Users must be able to view their upcoming and past appointments in their profile. | Data Management | Medium | RQ10 |
| RQ15 | Users must be able to make a deposit payment to confirm their appointment after approval. | System Processing | High | RQ12 |
| RQ16 | Users must be able to choose from multiple payment methods and complete the payment in-app. | System Processing | High | RQ15 |
| RQ17 | Users must be able to leave a rating and review for their barber/stylist/nail technician. | User Interaction | Medium | RQ10 |
| RQ18 | Users must be able to receive feedback from the barbershop/stylist regarding their request. | System Processing | Medium | RQ10, RQ11 |
| RQ19 | Users must earn loyalty points for each completed appointment. | System Processing | Medium | RQ10 |
| RQ20 | Users must be able to view their accumulated loyalty points in their profile and redeem them. | Data Management | Medium | RQ19 |

**RQ01: Users must be able to create an account using email and password or social login (Google, Facebook).**

**Inputs:**

* Email and password (for email-based registration)
* Social media login credentials (Google/Facebook)

**Outputs:**

* Confirmation of account creation
* Redirection to the login screen upon successful registration

**Process:**

1. User enters their email and password or selects a social login option.
2. The system verifies email/password or handles OAuth for social login.
3. If successful, the system creates a new account.
4. If there are errors (e.g., email already in use), the system displays an error message.

**Constraints:**

* Email must be unique.
* Social login must be authenticated and authorized.

**RQ02: Users must be able to log in and log out securely.**

**Inputs:**

* Username (email or username)
* Password (for manual login)
* Social login credentials (Google/Facebook)

**Outputs:**

* Confirmation of successful login
* User redirection to the dashboard
* Confirmation of logout and redirection to the login screen

**Process:**

1. User enters their credentials or selects a social login option.
2. The system checks the credentials against stored data (for manual login) or uses OAuth (for social login).
3. Upon successful login, the system starts a session and redirects the user to the dashboard.
4. On logout, the system terminates the session and redirects the user to the login screen.

**Constraints:**

* Password must be securely encrypted.
* Social login should handle token expiration.

**RQ03: Users must be able to update their profile details (e.g., name, contact info, profile picture).**

**Inputs:**

* Updated profile details (name, contact info, profile picture)

**Outputs:**

* Confirmation of profile update
* Display of updated profile on the user's profile page

**Process:**

1. User navigates to the profile settings page.
2. The system displays current profile information with editable fields.
3. User updates the desired fields.
4. The system validates the inputs (e.g., valid email format, image size).
5. The system updates the profile information in the database and displays the updated data.

**Constraints:**

* Profile picture size limit.
* Valid email format for contact info.

**RQ04: Users must be able to browse a catalog of available services, categorized into men’s and women’s sections.**

**Inputs:**

* User selects "Men’s" or "Women’s" section.

**Outputs:**

* List of services categorized by gender (e.g., haircuts, styling, manicures)

**Process:**

1. User selects a category (Men’s or Women’s).
2. The system queries the database for services related to the selected category.
3. The system displays the services in an organized list with service names, descriptions, and prices.

**Constraints:**

* Services must be categorized correctly based on the gender-specific options.

**RQ05: Users must be able to search and filter services by name, price range, or estimated duration.**

**Inputs:**

* Search keyword (service name)
* Price range (minimum and maximum)
* Estimated duration (minimum and maximum)

**Outputs:**

* Filtered list of services that match the search criteria

**Process:**

1. User inputs search criteria (service name, price range, duration).
2. The system filters services based on the criteria.
3. The system displays the filtered services that match the user's search.

**Constraints:**

* Price and duration should be numeric values within defined ranges.

**RQ06: Users must be able to upload a custom image under an "Others" option.**

**Inputs:**

* Custom image file

**Outputs:**

* Confirmation of successful image upload

**Process:**

1. User selects the "Others" option to upload a custom image.
2. The system prompts the user to upload an image file.
3. The system validates the image file (e.g., file type, size).
4. Upon successful upload, the image is stored and associated with the user profile.

**Constraints:**

* Image file types allowed (e.g., JPG, PNG).
* Maximum file size.

**RQ07: Users must be able to view service details, including estimated price, duration, and description.**

**Inputs:**

* Service selection (clicking on a service)

**Outputs:**

* Detailed information about the selected service, including price, duration, and description

**Process:**

1. User selects a service from the catalog.
2. The system retrieves the details of the selected service from the database.
3. The system displays the details, including price, duration, and description.

**Constraints:**

* Service details should be accurate and up-to-date in the database.

**RQ08: Users must be able to view available time slots for their selected service and preferred date.**

**Inputs:**

* Service selection
* Preferred date

**Outputs:**

* List of available time slots for the selected service on the preferred date

**Process:**

1. User selects a service and provides their preferred date.
2. The system checks the availability of time slots for the selected service on the provided date.
3. The system displays the available time slots for the user to choose from.

**Constraints:**

* Time slots should only be available if the professional is free on the selected date.

**RQ09: Users must be able to see a list of available barbers/stylists/nail technicians and choose one.**

**Inputs:**

* Selected service and time slot

**Outputs:**

* List of available barbers/stylists/nail technicians

**Process:**

1. After selecting a service and time slot, the system checks which professionals are available at the given time.
2. The system displays the available professionals to the user.

**Constraints:**

* Availability of professionals should be dynamically checked based on the time slot and selected service.

**RQ10: Users must be able to request an appointment by selecting a service, a professional, and a time slot.**

**Inputs:**

* Selected service
* Chosen professional
* Chosen time slot

**Outputs:**

* Confirmation of the appointment request
* Appointment details displayed in the user's profile

**Process:**

1. User selects a service, a professional, and a time slot.
2. The system verifies the availability of the selected professional and time slot.
3. The system creates an appointment request with the selected details and stores it in the database.
4. The system confirms the request and displays the appointment details to the user.

**Constraints:**

* The appointment can only be created if the selected professional is available at the chosen time slot.

**RQ11: The system must send the appointment request to the barbershop/salon for approval.**

**Inputs:**

* Appointment request details (service, professional, time slot)

**Outputs:**

* Notification to the barbershop/salon for approval

**Process:**

1. Once the user submits an appointment request, the system sends the request to the barbershop/salon's system for approval.
2. The system notifies the barbershop/salon about the new appointment request.
3. The barbershop/salon reviews the request and approves or declines it.

**Constraints:**

* The system must ensure that the request is sent securely to the barbershop/salon for processing.

**RQ12: Users must be notified when their appointment is approved, declined, or modified.**

**Inputs:**

* Appointment status (approved, declined, modified)

**Outputs:**

* Notification to the user about the status change

**Process:**

1. Once the barbershop/salon approves, declines, or modifies an appointment, the system updates the appointment status.
2. The system sends a notification to the user with the updated status (approved, declined, or modified).

**Constraints:**

* Notifications must be sent in real-time to ensure users are promptly informed.

**RQ13: Users must be able to cancel or reschedule their appointment before a set deadline.**

**Inputs:**

* Appointment details (service, professional, time slot)
* Cancellation or rescheduling request

**Outputs:**

* Confirmation of the cancellation or rescheduling
* Updated appointment status in the user’s profile

**Process:**

1. User navigates to their profile and selects the appointment to cancel or reschedule.
2. The system verifies that the cancellation or rescheduling request is within the allowed deadline.
3. If within the deadline, the system cancels or reschedules the appointment, updating the status accordingly.

**Constraints:**

* The system must enforce the cancellation/rescheduling deadline, which must be defined and strictly followed.

**RQ14: Users must be able to view their upcoming and past appointments in their profile.**

**Inputs:**

* User login

**Outputs:**

* List of upcoming and past appointments with details (date, time, service, professional)

**Process:**

1. The user logs into their profile.
2. The system retrieves the user's upcoming and past appointments from the database.
3. The system displays a list of appointments with relevant details (date, time, service, professional).

**Constraints:**

* The system should categorize appointments as "upcoming" or "past" based on the current date.

**RQ15: Users must be able to make a deposit payment to confirm their appointment after approval.**

**Inputs:**

* Payment details (amount, payment method)

**Outputs:**

* Confirmation of successful payment and deposit
* Updated appointment status to "confirmed" in the user's profile

**Process:**

1. Once the appointment is approved, the system prompts the user to make a deposit payment.
2. The user provides payment details and selects a payment method.
3. The system processes the payment, and if successful, updates the appointment status to "confirmed."
4. The user receives confirmation of the payment and appointment confirmation.

**Constraints:**

* Payment processing must be secure and support multiple payment methods (e.g., credit card, PayPal).
* The deposit must be a non-refundable or refundable according to the barbershop/salon's policy.

**RQ16: Users must be able to choose from multiple payment methods and complete the payment in-app.**

**Inputs:**

* Payment method selection (credit card, PayPal, etc.)
* Payment amount

**Outputs:**

* Confirmation of payment success or failure

**Process:**

1. The user selects a payment method (credit card, PayPal, etc.).
2. The system processes the payment through the chosen payment gateway.
3. If the payment is successful, the system confirms the transaction.
4. If payment fails, the system notifies the user with the error message.

**Constraints:**

* The system must integrate with multiple payment gateways to allow flexibility in payment methods.
* The payment process should be secure, and sensitive information (like card details) should not be stored on the system.

**RQ17: Users must be able to leave a rating and review for their barber/stylist/nail technician.**

**Inputs:**

* Rating (numeric value)
* Review text

**Outputs:**

* Confirmation of review submission
* Display of submitted rating and review on the professional’s profile

**Process:**

1. After the appointment, the system prompts the user to rate and review their barber/stylist/nail technician.
2. The user provides a rating (e.g., 1-5 stars) and writes a review.
3. The system validates the review (e.g., no offensive language) and stores it in the database.
4. The system displays the review and rating on the professional’s profile for future users to view.

**Constraints:**

* The system should filter out inappropriate or offensive language from reviews.

**RQ18: Users must be able to receive feedback from the barbershop/stylist regarding their request.**

**Inputs:**

* Feedback from the barbershop/stylist

**Outputs:**

* Notification to the user about the feedback

**Process:**

1. After the appointment, the barbershop/stylist provides feedback on the user’s request or behavior.
2. The system sends the feedback to the user via a notification.

**Constraints:**

* Feedback should be constructive and professional.

**RQ19: Users must earn loyalty points for each completed appointment.**

**Inputs:**

* Completed appointment details

**Outputs:**

* Earned loyalty points for the user

**Process:**

1. After an appointment is marked as completed, the system calculates loyalty points based on predefined criteria (e.g., points per appointment).
2. The system updates the user’s profile to reflect the new loyalty points balance.

**Constraints:**

* The system should track loyalty points accurately and ensure that they are only awarded for completed appointments.

**RQ20: Users must be able to view their accumulated loyalty points in their profile and redeem them.**

**Inputs:**

* User login

**Outputs:**

* Loyalty points balance and redemption options

**Process:**

1. The user logs into their profile and navigates to the loyalty points section.
2. The system retrieves the user's accumulated loyalty points from the database.
3. The system displays the points balance and any available redemption options (e.g., discounts, free services).

**Constraints:**

* The system should clearly define how points can be redeemed (e.g., for a discount or free service).