CSC 431

Feed Me

Software Requirements Specification (SRS)

|  |  |
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Version History

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author(s) | Change Comments |
| 1 | 2/5/2020 | group ALPHA | Requirements (functional and non-functional) |
| 2 | Feb 9, 2020 | Team Feed Me | First Draft on all Requirements |
| 3 | Feb 21, 2020 | Feed Me | Added Use Cases and completed tables |
| 4 | Feb 26, 2020 | Feed Me | Fixed Formatting, final draft |

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1. Table of Tables

<Generate table here>

1. Table of Figures
2. System Requirements
   1. Functional Requirements
      1. Store Food Criteria

|  |  |
| --- | --- |
| ID | FR1 |
| Title | Store Food Criteria |
| Description | The system needs to store the criteria (distance, price, diet) that the user saves for when the meal generation occurs |
| Priority | 0 |
| Precondition(s) | The criteria has defaults for criteria (<2 miles, any price, any diet) |
| Basic Flow | 1. The user selects Max Distance, price, adn diet if they want 2. The system stores values for while the app is open |
| Postconditions(s) | The criteria values are stored as long as app remains open |
| Use Case Diagram | Use Case 1 |

* + 1. Restaurant Pull

|  |  |
| --- | --- |
| ID | FR2 |
| Title | Restaurant Pull |
| Description | The system needs to collect all restaurant information (address, website) within a user specified distance from a database/API |
| Priority | 0 |
| Precondition(s) | The user clicks the food generator button |
| Basic Flow | 1. The user selects the ‘Feed Me’ labelled button 2. The system searches for restaurants (Google Places API ) that fit criteria set by user previously (FR1) 3. System then random selects one restaurant that was returned from search |
| Postconditions(s) | The system stores result for menu pull |
| Use Case Diagram | Use Case 1 |

* + 1. Menu Pull

|  |  |
| --- | --- |
| ID | FR3 |
| Title | Restaurant Menu pull |
| Description | The system should pull the menu of the selected restaurant based on the random generator from a database/API |
| Priority | 3 |
| Precondition(s) | The system must have generated random restaurant already |
| Basic Flow | 1. The system gets restaurant that was previously generated 2. The system randomly selects and returns an item from the restaurant menu |
| Postconditions(s) | The system sends user to second view to display menu item chosen |
| Use Case Diagram | Use Case 2 |

* + 1. Search Time

|  |  |
| --- | --- |
| ID | FR4 |
| Title | Search Time |
| Description | Searching results should show up under 5 seconds. If no restaurants open, display error messages and revert back to homepage. |
| Priority | 4 |
| Precondition(s) | The system must be searching for restaurants |
| Basic Flow | 1. The system is searching for restaurants 2. The system begins to keep time of search 3. If it passes 5 seconds, no result was found 4. User is notified that no restaurant under their criteria was found |
| Postconditions(s) | The system does not count search as part of their 3 choices |
| Use Case Diagram | Use Case 1 |

* + 1. External links suggestion

|  |  |
| --- | --- |
| ID | FR5 |
| Title | External Links |
| Description | The system should allow only available food delivery apps for that restaurant to be clickable. |
| Priority | 3 |
| Precondition(s) | The system must have generated random meal |
| Basic Flow | 1. The system shows available food delivery apps for restaurant 2. The user can click those that are available 3. The system sends user to link that was clicked (app or website) |
| Postconditions(s) | The system is closed if link was selected |
| Use Case Diagram | Use Case 2 |

* + 1. Map

|  |  |
| --- | --- |
| ID | FR6 |
| Title | Map |
| Description | The system should use Google Maps and Places to identify the geolocation of the user and select the restaurants within distance filter |
| Priority | 0 |
| Precondition(s) | The system must be open on mobile device |
| Basic Flow | 1. The user 2. The user can click those that are available 3. The system sends user to link that was clicked (app or website) |
| Postconditions(s) | The system is closed if link was selected |
| Use Case Diagram | Use Case 1 |

* + 1. Button Use Countdown

|  |  |
| --- | --- |
| ID | FR7 |
| Title | Button Use Countdown |
| Description | The system should be counting down 1 hour from the first click since the app opened and if the user clicks the button again within the hour it decreases button use and locks button after 3 clicks for the remaining amount of time. |
| Priority | 5 |
| Precondition(s) | The system must have generated random meal and have it displayed for user |
| Basic Flow | 1. The user clicks the button and a random meal was generated 2. The system (starting from 3) decreases number of times button is clickable 3. The user clicks again 4. The system clicks again (etc..) 5. If the user clicks three times within the hour, the system locks button |
| Postconditions(s) | The system stores value of allowable clicks, locks button if clicks are done |
| Use Case Diagram | Use Case 2 |

* 1. **Non-Functional Requirements**
     1. Home Page

|  |  |
| --- | --- |
| ID | NFR1 |
| Title | Home Page |
| Description | When the user opens the app they will see either the default/previously specified filters displayed and below the generator button and how many times they can click the button (3 max/hour). |
| Priority | 0 |
| Applicable FR(s) | FR1, FR2, FR3, FR4 |

* + 1. Filter switches

|  |  |
| --- | --- |
| ID | NFR2 |
| Title | Filter Switches |
| Description | The user can switch on or off the filters for diet, price, and distance on the home page. |
| Priority | 2 |
| Applicable FR(s) | FR1 |

* + 1. “Feed Me” Button

|  |  |
| --- | --- |
| ID | NFR3 |
| Title | “FeedMe” Button |
| Description | The user clicks the button and the system provides a random meal from a random restaurant based on specified filters in a new app view.. |
| Priority | 0 |
| Applicable FR(s) | FR2, FR3, FR4, FR6 |

* + 1. Meal View

|  |  |
| --- | --- |
| ID | NFR4 |
| Title | Meal View |
| Description | The system displays the Restaurant chosen, the meal chosen, and links to available websites or food delivery apps and directions (Maps) that the user can then use. It also contains a link to return to the home page if they would like to select again. |
| Priority | 1 |
| Applicable FR(s) | FR2, FR5, FR7 |

* + 1. External Buttons

|  |  |
| --- | --- |
| ID | NFR5 |
| Title | External buttons |
| Description | The user can select to leave the app to go to the restaurants website, go to preferred maps app, or go to food delivery app (one for each) |
| Priority | 3 |
| Applicable FR(s) | FR5 |

* + 1. Back Button

|  |  |
| --- | --- |
| ID | NFR6 |
| Title | Back Button |
| Description | The user clicks this button if the choice is unsatisfactory, returning them to the previous page by one click or to the home page by a click. |
| Priority | 2 |
| Applicable FR(s) | FR7 |

1. System Constraints
   1. Tool Constraints
      1. iOS Application Framework (Xcode)

|  |  |
| --- | --- |
| ID | TC1 |
| Title | iOS application framework using Xcode sandbox |
| Description | Built with iOS mobile application framework to allow the users to view and interact with the application. |
| Priority | 0 |

* 1. Language Constraints
     1. Swift

|  |  |
| --- | --- |
| ID | LC1 |
| Title | Swift |
| Description | The application will be written in the Swift programming language for iOS devices. |
| Priority | 1 |

* + 1. Adobe Photoshop

|  |  |
| --- | --- |
| ID | LC2 |
| Title | Adobe Photoshop |
| Description | The application’s logo and some UX will be created through Adobe photoshop. |
| Priority | 1 |

* 1. Platform Constraints
     1. Application on iOS

|  |  |
| --- | --- |
| ID | PC1 |
| Title | Application on iOS |
| Description | Downloadable application on iOS. Allow users to download, install and utilize the service. |
| Priority | 4 |

* 1. Hardware Constraints
     1. Apple mobile iOS

|  |  |
| --- | --- |
| ID | HC1 |
| Title | Apple mobile iOS |
| Description | The app should work on mobile devices and utilize hardware to open other apps on the users phone |
| Priority | 1 |

* 1. Network Constraints
     1. Wifi or 3G Availability

|  |  |
| --- | --- |
| ID | NC1 |
| Title | Wifi or 3G Availability |
| Description | The system needs access to network to access geolocation |
| Priority | 1 |

* 1. Deployment Constraints
     1. The App Store

|  |  |
| --- | --- |
| ID | DC1 |
| Title | The App Store |
| Description | The system should be made available through the iOS app store and downloadable through there |
| Priority | 5 |

* 1. Transition & Support Constraints
     1. No Support

|  |  |
| --- | --- |
| ID | TSC1 |
| Title | No Support |
| Description | Once this class is done there will be no support for the app |
| Priority | 5 |

* 1. Budget & Schedule Constraints
     1. Schedule

|  |  |
| --- | --- |
| ID | S1 |
| Title | Schedule |
| Description | Follow the course schedule as it is presented on the syllabus and have a working prototype by the end of the semester. |
| Priority | 1 |

* + 1. Budget

|  |  |
| --- | --- |
| ID | B1 |
| Title | Budget |
| Description | The client has given us no funding |
| Priority | 5 |

* 1. Miscellaneous Constraints
     1. PLACEHOLDER

|  |  |
| --- | --- |
| ID | <a unique ID for the constraint, e.g., C1)> |
| Title | <Insert title> |
| Description | <A one or two sentence description> |
| Priority | <Priority from 0 (highest) – 5 (lowest)> |

1. Requirements Modeling
   1. Use Case 1: Home Page

User

Hungry User

Store Food Criteria

Restaurant Pull

Menu Pull

Search Time

<<extends>>

<<includes>>

Filter Switches

“Feed Me”Button

Map

<<includes>>

* 1. **Use Case 2: Meal Page (via “Feed Me Button”)**

Satisfied User

Unsatisfied User

External Link Suggestions

Button Use Countdown

Back Button

External Buttons

1. Evolutionary Requirements
   1. Functional Requirements
      1. Placeholder

|  |  |
| --- | --- |
| Title | <Insert title> |
| Description | <A one or two sentence description> |
| Priority | <Priority from 0 (highest) – 5 (lowest)> |
| Precondition(s) | <What needs to happen before> |
| Postconditions(s) | <What happens as a result> |
| Use Case Diagram | <Link or number, if present> |

* + 1. Non-Functional Requirements
    2. Placeholder

|  |  |
| --- | --- |
| Title | <Insert title> |
| Description | <A one or two sentence description> |
| Priority | <Priority from 0 (highest) – 5 (lowest)> |
| Applicable FR(s) | <Which functional requirement(s) is this applicable to?> |