Back-end backlog items

## Format for each item:

1. Item short title
   1. User story describing backlog item
   2. Acceptance criteria for backlog item
   3. If a dependency exists place here

# Items:

1. Define project architecture
   1. As a developer I want to have a defined project architecture by which to adhere the system to
   2. The project file system must be well organized in accordance to the best practices of Scala and the frameworks used in the project
2. Create database
   1. As a user I want the application to store persistent data so I can Access it when I log in
   2. The project must have a defined database schema as well as a database system to use for data persistence
3. Make User account system
   1. As a user I want to be able to create an account to use the system so that I can access the same account across all my devices
   2. The project must have a sign-up system so users can create new accounts
   3. 2
4. Make login system
   1. As a user I want to be able to login into my account so I can see my data
   2. Back end must have a way to allow a user session to commence given a user’s account credentials
   3. 3
5. Secure user accounts
   1. As a user I want my account to be secure so that other entities with malicious or non-malicious intent may not access my account’s information
   2. User password information is encrypted before storage
   3. 3
6. Create “add wallet” endpoint
   1. As a user I want to be able to add a wallet to my profile so that I can organize my receipts depending on what type of spending they relate to
   2. A wallet instance related to the user must be created when the endpoint is triggered with the required wallet information
   3. 2
7. Create “add receipt” endpoint
   1. As a user I want to be able to add a receipt to my wallet so that I may track my purchases in the system
   2. API endpoint creates receipt instance in database related to user and to a wallet. This instance may also contain information about specific items and/or an image
   3. 5 (since a receipt needs to be in a wallet)
8. Create item input form handling endpoint
   1. As a user I want to add items into my receipts so that I can track my purchases
   2. Item input form provided through endpoint triggers the addition of these items into a related receipt.
   3. 7
9. Create spending statistics suite
   1. As a user I want to be able to track my spending habits through time
   2. Based on a user’s spending data we must be able to provide his amount spent over time and average spent per day statistics for each wallet
10. Create “get statistics” endpoint
    1. As a user I want to access my spending statistics from the application interface
    2. Endpoint shall provide an object containing statistics data to the end-user based on their data
    3. 9
11. Make a receipt search endpoint
    1. As a user I want to be able to find my receipt information via search so that I may access them whenever I need the information
    2. Given a search term, we must provide an object with all the related receipts
    3. 7
12. Make an item search endpoint
    1. As a user I want to be able to find my item’s purchase information so that I may access this data whenever it is necessary
    2. Given a search term, we must provide an object with all the related items
    3. 8
13. Make a general endpoint to search both receipts and items
    1. As a user I want to find data of both receipts and items when I perform a search so that I may find all the information related to my search query
    2. Given a search term, we must provide object with all the related receipts and items.
    3. 11, 12

# Optional Items

* Use ORM for better database access
  + As a developer I want to be able to connect to the database without having to write database queries so that I may secure the system from injection attacks
  + Connections to database can be done without having to add query strings with the desired data In them
  + 2
* Host application in the cloud
  + As a developer I want my application to run in the cloud so that other users may enjoy it through the web
  + The application is hosted online in a cloud PaaS provider instead of on a local machine.