

# TabDrop System and Unit Test Report

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## System Test scenarios

### Sprint 1

No user stories completed

### Sprint 2

**1. As a user, I need to be able to enter names for people and new names so that I can split the bill with these people.**

Scenario

1. Click the text field
  - a. Enter a name (example: "Bob")
2. Click "Add"
  - a. The name will display on a list underneath

### Sprint 3

**1. As a user, I need to select a photo from my camera roll so that I can split an old receipt.**

Scenario

1. Open the TabDrop app
2. Click "Choose photo"
  - a. Choose a photo of a receipt
  - b. User should see the photo on the landing page
3. Click "Upload photo"

**2. As a user, I need to be able to take a photo of the receipt so I can split it at the same time I receive the receipt.**

Scenario

1. Open the TabDrop app
2. Click "Take a photo"
  - a. Take a photo of a receipt
  - b. Click "Use Photo"
  - c. User should see the photo on the landing page
3. Click "Upload photo"

## Sprint 4

**1. As a user, I need to be able to see the list of items from the photo of my receipt, so that I can confirm everything is correct.**

Scenario

1. Open the TabDrop app
2. Click "Choose photo" or "Take a photo"
  - a. Choose or take a photo of a receipt (Click "Use Photo" if you take a photo)
  - b. User should see the photo on the landing page
3. Click the text field
  - a. Enter a name (example: "Bob")
4. Click "Add"
  - a. User should see the name on a list underneath
5. Repeat steps 3 and 4 if you want to add more names
6. Swipe a name to the left
  - a. User should see a red "Delete" button
  - b. Click the "Delete" button or continue swiping to the left
  - c. The name will no longer be displayed
7. Repeat step 6 if you want to delete more names
8. Click "Drop people in the next screen"
  - a. User should see the list of names entered at the top
  - b. User should see the receipt items underneath the names

**2. As a user, I need to be able to drag people into their items so that I can assign each person to at least one item on the bill.**

Scenario (continued from Sprint 4, user story 1)

9. Press and hold a name at the top
  - a. User should be able to drag the name around the screen
10. Drag the name to the item they want to pay for
  - a. User should see the name on the "Paid by:" line for that item
11. Repeat the drag and drop at least once for each item
12. Click "Calculate Final Split"
  - a. User should see the subtotal, tax, tip, and total of the full receipt
  - b. User should see the breakdown of subtotal, tax, tip, and total for each name entered
13. Optional, click the text field for "Tax Percent"
  - a. Enter the tax percent (example: "9.13")
  - b. User should see the tax will be updated for full receipt and for every name
14. Optional, click the text field for "Tip Percent"
  - a. Enter the tip percent (example: "15")
  - b. User should see the tip will be updated for full receipt and for every name

**3. As a user, I need to be able to add or remove items so that I can modify the end list.**

Scenario (continued from Sprint 4, user story 1)

7. Click "+" at the top right of the screen
8. Click the "New Item" text field
  - a. Enter a name for the item you want to add (example: "Cheese")
9. Click the "Item Price" text field
  - a. Enter the item price (example: "3" or "3.0")
10. Click "Add Item"
  - a. An alert message will appear saying "Item is added!"
11. Click "OK" on the alert
12. Click "Back"
  - a. The screen will return to the drag and drop view (Sprint 4, user story 2)
13. Swipe an item card to the left to delete
  - a. User should see a red "Delete" button
  - b. Click the "Delete" button or continue swiping to the left
  - c. The item will no longer be displayed

## Unit Tests

To test the backend files first follow these steps:

1. Clone the repository.
2. Create a python virtual environment and activate it.
3. Enter on the console/terminal, "pip install -r requirements.txt", within the folder with the repository to install all dependencies.
4. Create a file named ".env" with your Azure API information with the format below:

API\_KEY=<Azure api key>

ENDPOINT=<Azure api endpoint>

5. To test if the Azure recognizer file successfully scans the receipt photo, we can run testing.py that is in the testing folder. The testing folder files include: receipt.json, receipt\_pic.jpeg, and testing.py. Paste the base64 string of desired receipt photo into receipt.json in the form.
 

```
{"img_string": "<base64 string>"}
```
6. Run testing.py
  - a. The file testing.py will print to console the list of items in the format:
 

```
[ {"item_name": <item_name> }, {"price": <item_price>}, ...]
```
  - b. If the list of items match the items displayed in the receipt picture, then the Azure recognizer successfully has scanned the item.
  - c. To do more black box testing, repeat step 5 with a base64 string of a different receipt picture.
7. To further deploy locally and test flaskapi.py:
  - a. IF ON WINDOWS: in console, enter "set FLASK\_APP=flaskapi.py"
  - b. IF ON MAC: in console, enter "export FLASK\_APP=flaskapi.py".

- c. In the console, enter "flask run". The backend should be running locally.
- d. If the deployment is successful, flaskapi.py is functioning properly.