Sprint 1 Planning Document

Feb 12 – Mar 2

# The Flabbergasters

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# Sprint Overview

During this sprint we are going to utilize extreme programming with pair programming, and incremental prototyping to help mitigate the risks / challenges for this exercise. The goal, by the end of the sprint, is to have a horizontal prototype running on a physical server at the robotwaitress.tk domain space. We intend to have a multi-page navigable website unified by a global CSS. To better prepare for future increments all dummy data will be read into the html forms as JavaScript variables paving the way for the server to provide that data later.

# Scrum Master

Matthew Lister

# Meeting Schedule

(@330pm unless otherwise noted)

Feb 12: finish planning document

Feb 14: no meeting (midterm review)

Feb 16: no meeting (midterm)

Feb 20: virtual machines up and running

Feb 21: first code review

Feb 23: second code review

Feb 26: final CSS pattern set

Feb 28: Practice demo / final configurations

Mar 2: Demo presentation

# Risks and Challenges

Writing code is going to be the largest challenge for this sprint. Our HTML, CSS, and JavaScript skill level varies from inexperienced to novice. To address this challenge, we are going to implement team programming (i.e. extreme programming, where two programmers work on one item at a time.). Furthermore, in order to increase consistency in both solution mechanisms and visual style we plan to hold multiple code reviews. Hopefully, extreme programming will result in a more uniform code-base for our team to standardize.

During this phase, building a working design environment for our programmers will also be a challenge. Each team will need a virtual machine running Django for testing purposes. Also building the physical server with matching specifications to virtual machines could be difficult. We believe that putting a multi-gigabyte .VHD file on GitHub would not be practical. However the configuration files for the Django server must be accessible to the team to modify and test, hence the need to have virtual machine.

Building incremental prototypes through extreme programming presents a challenge for our team in particular. The Fabbergasters have multiple commitments outside of school and scheduling shared time may be difficult. Lastly, this sprint will be delayed by the CS 3450 midterm exam, but hopefully the team will get a chance to both study and code together.

# Sprint Plan

## User Story A

As a developer I need a framework to support the menu view

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Task Description | Owner | Estimated Time | Actual Time | Done (Y/N) |
| 1 | Write HTML Framework | ML | 4 |  |  |
| 2 | Assign JS variables to mimic database | ML | 4 |  |  |
| 3 | Write JS functions to fill in HTML with data | ML | 4 |  |  |
| 4 | Create CSS and make things look nice | ML | 4 |  |  |
| 5 | After code review, modify CSS and JS to conform | ML | 2 |  |  |
| 6 | Implement design changes from design review | ML | 2 |  |  |
| 7 | After code-review 2 repeat 5 | ML | 2 |  |  |
| 8 | Give Mike CSS / get master CSS | MA | 1 |  |  |
| 9 | Create DJango view to display page | ML | 1 |  |  |
| 10 | Update Dev server with all pages | ML | 1 |  |  |

|  |  |
| --- | --- |
| Test Case A.1 | |
| Title | Handle mock database changes |
| Pre-Conditions | HTML and Javascript must be present |
| Test Steps | 1. Load the view as written by developer into Chrome 2. Modify the Menu Item variable and reload page |
| Expected Results | Pass condition; new value/object present |

|  |  |
| --- | --- |
| Results for Test Case A.1 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

|  |  |
| --- | --- |
| Test Case A.2 | |
| Title | Verify page in Chrome |
| Pre-Conditions | HTML and Javascript must be present |
| Test Steps | 1. Load webpage in Chrome 2. Open Dev tools 3. View Elements and Console for errors |
| Expected Results | No errors present |

|  |  |
| --- | --- |
| Results for Test Case A.2 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

## User Story B

As a developer I need a framework to support the Admin view

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Task Description | Owner | Estimated Time | Actual Time | Done (Y/N) |
| 1 | Write HTML Framework | MA | 4 |  |  |
| 2 | Assign JS variables to mimic database | MA | 4 |  |  |
| 3 | Write JS functions to fill in HTML with data | MA | 4 |  |  |
| 4 | Create CSS and make things look nice | MA | 4 |  |  |
| 5 | After code review, modify CSS and JS to conform | MA | 2 |  |  |
| 6 | Implement design changes from design review | MA | 2 |  |  |
| 7 | After code-review 2 repeat 5 | MA | 2 |  |  |
| 8 | Give Mike CSS / get master CSS | MA | 1 |  |  |
| 9 | Create DJango view to display page | MA | 1 |  |  |
| 10 | Update Dev server with all pages | MA | 1 |  |  |

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| --- | --- |
| Test Case B.1 | |
| Title | Handle mock database changes |
| Pre-Conditions | HTML and Javascript must be present |
| Test Steps | 1. Load the view as written by developer into Chrome 2. Modify the Active Order variable and reload page |
| Expected Results | Pass condition; new value/object present |

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| --- | --- |
| Results for Test Case B.1 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

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| --- | --- |
| Test Case B.2 | |
| Title | Verify page in Chrome |
| Pre-Conditions | HTML and Javascript must be present |
| Test Steps | 1. Load webpage in Chrome 2. Open Dev tools 3. View Elements and Console for errors |
| Expected Results | No errors present |

|  |  |
| --- | --- |
| Results for Test Case B.2 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

## User Story C

As a developer I need a framework to support the Cook view

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Task Description | Owner | Estimated Time | Actual Time | Done (Y/N) |
| 1 | Write HTML Framework | AG | 4 |  |  |
| 2 | Assign JS variables to mimic database | AG | 4 |  |  |
| 3 | Write JS functions to fill in HTML with data | AG | 4 |  |  |
| 4 | Create CSS and make things look nice | AG | 4 |  |  |
| 5 | After code review, modify CSS and JS to conform | AG | 2 |  |  |
| 6 | Implement design changes from design review | AG | 2 |  |  |
| 7 | After code-review 2 repeat 5 | AG | 2 |  |  |
| 8 | Give Mike CSS / get master CSS | MA | 1 |  |  |
| 9 | Create DJango view to display page | AG | 1 |  |  |
| 10 | Update Dev server with all pages | AG | 1 |  |  |

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| --- | --- |
| Test Case C.1 | |
| Title | Handle mock database changes |
| Pre-Conditions | HTML and Javascript must be present |
| Test Steps | 1. Load the view as written by developer into Chrome 2. Modify the Active Orders variable and reload page |
| Expected Results | Pass condition; new value/object present |

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| --- | --- |
| Results for Test Case C.1 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

|  |  |
| --- | --- |
| Test Case C.2 | |
| Title | Verify page in Chrome |
| Pre-Conditions | HTML and Javascript must be present |
| Test Steps | 1. Load webpage in Chrome 2. Open Dev tools 3. View Elements and Console for errors |
| Expected Results | No errors present |

|  |  |
| --- | --- |
| Results for Test Case C.2 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

## User Story D

As a developer I need a framework to support the inventory view

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Task Description | Owner | Estimated Time | Actual Time | Done (Y/N) |
| 1 | Write HTML Framework | AF | 4 |  |  |
| 2 | Assign JS variables to mimic database | AF | 4 |  |  |
| 3 | Write JS functions to fill in HTML with data | AF | 4 |  |  |
| 4 | Create CSS and make things look nice | AF | 4 |  |  |
| 5 | After code review, modify CSS and JS to conform | AF | 2 |  |  |
| 6 | Implement design changes from design review | AF | 2 |  |  |
| 7 | After code-review 2 repeat 5 | AF | 2 |  |  |
| 8 | Give Mike CSS / get master CSS | MA | 1 |  |  |
| 9 | Create DJango view to display page | AF | 1 |  |  |
| 10 | Update Dev server with all pages | AF | 1 |  |  |

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| Test Case D.1 | |
| Title | Handle mock database changes |
| Pre-Conditions | HTML and Javascript must be present |
| Test Steps | 1. Load the view as written by developer into Chrome 2. Modify the Food Item variable and reload page |
| Expected Results | Pass condition; new value/object present |

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| --- | --- |
| Results for Test Case D.1 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

|  |  |
| --- | --- |
| Test Case D.2 | |
| Title | Verify page in Chrome |
| Pre-Conditions | HTML and Javascript must be present |
| Test Steps | 1. Load webpage in Chrome 2. Open Dev tools 3. View Elements and Console for errors |
| Expected Results | No errors present |

|  |  |
| --- | --- |
| Results for Test Case D.2 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

## User Story E

As a developer I need a framework to support the customer review upload page

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Task Description | Owner | Estimated Time | Actual Time | Done (Y/N) |
| 1 | Write HTML Framework | AF | 4 |  |  |
| 2 | Assign JS variables to mimic database | AF | 4 |  |  |
| 3 | Write JS functions to fill in HTML with data | AF | 4 |  |  |
| 4 | Create CSS and make things look nice | AF | 4 |  |  |
| 5 | After code review, modify CSS and JS to conform | AF | 2 |  |  |
| 6 | Implement design changes from design review | AF | 2 |  |  |
| 7 | After code-review 2 repeat 5 | AF | 2 |  |  |
| 8 | Give Mike CSS / get master CSS | MA | 1 |  |  |
| 9 | Create DJango view to display page | AF | 1 |  |  |
| 10 | Update Dev server with all pages | AF | 1 |  |  |

|  |  |
| --- | --- |
| Test Case E.1 | |
| Title | Verify page in Chrome |
| Pre-Conditions | HTML and Javascript must be present |
| Test Steps | 1. Load webpage in Chrome 2. Open Dev tools 3. View Elements and Console for errors |
| Expected Results | No errors present |

|  |  |
| --- | --- |
| Results for Test Case E.1 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

## User Story F

As a developer I need an environment to support developing in a two tier Client/Server architecture. I.e. will not use proxy server

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| # | Task Description | Owner | Estimated Time | Actual Time | Done (Y/N) |
| 1 | Build a VM to run mint, python3, pip3, django, git, and visual studio code | Matt | 3 |  |  |
| 2 | Configure Django on VM | Matt | 2 |  |  |
| 3 | Create VM setup instructions for developers | Matt | 5 |  |  |
| 4 | Build server (install mint OS) | Matt | 1 |  |  |
| 5 | Configure Django on server | Matt | 1 |  |  |
| 6 | enable remote access to port 80 and configure internal addressing | Matt | 1 |  |  |
| 7 | Create backup of server and backup schedule | Matt | 2 |  |  |
| 8 | Aaron builds development VM | Aaron | 2 |  |  |
| 9 | Abe builds development VM | Abe | 3 |  |  |
| 10 | Mike Builds development VM | Mike | 4 |  |  |

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| Test Case F.1 | |
| Title | VM up and running |
| Pre-Conditions | Developer has followed setup instructions |
| Test Steps | 1. Developer activates VM and logs into machine 2. Developer issues runserver command to django 3. Developer opens browser to development server webpage |
| Expected Results | firefox should display: |

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| --- | --- |
| Results for Test Case F.1 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

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| Test Case F.2 | |
| Title | Server up and running |
| Pre-Conditions | Domain has been successfully registered and linked to the production server |
| Test Steps | tester navigates to http://robotwaitress.tk |
| Expected Results |  |

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| --- | --- |
| Results for Test Case F.2 | |
| Actual Results (outcome) |  |
| Tester Name |  |
| Date |  |

# Backlog (this is everything from product backlog)

|  |  |  |
| --- | --- | --- |
| Index | Use Case | Sprint Reference |
| 1 | As a customer, I would like to be able create an account |  |
| 2 | As a customer, I would like to be able to log into or out of my account |  |
| 3 | As a customer, I would like to sort the menu in various ways |  |
| 4 | As a customer, I would like to post a rating and select a predefined statement for a particular dish, leave a custom review, or leave neither a statement or a review. |  |
| 5 | As a customer, I would like to pay a bill |  |
| 6 | As a customer, I would like to order with or without giving a name (would be given a table or location instead) |  |
| 7 | As a customer, I would like to add items to my order |  |
| 8 | As a customer, I would like to request service from a waiter / waitress |  |
| 9 | As a customer, I want to order something after I’ve paid my bill |  |
| 10 | As a customer, I want to be able to change my table / location at any time |  |
| 11 | As a customer, I want to be able to order something for another table / location |  |
| 12 | As a customer, I want to use a phone app compatible with android or ios with the same functionality as the website (As time allows -- Stretch goal) |  |
| 13 | As a customer, I want to request a order-ID |  |
| 14 | As a customer, I want to be able to view the menu without logging in |  |
| 15 | As a cook, I need to be able to select an open order |  |
| 16 | As a cook, I need to view a selected order |  |
| 17 | As a cook, I need to sort open orders by at least one criteria |  |
| 18 | As a cook, I need to indicate that an entire order has finished cooking |  |
| 19 | As a cook, I need to signal that an order is ready for pickup |  |
| 20 | As a cook, I may need to indicate that part of an order has finished cooking |  |
| 21 | As a cook, I need to signal the waiter / waitress that there is a problem or clarification needed with the order |  |
| 22 | As a cook, I need to be able to update inventory counts |  |
| 23 | As a cook, I need to be able to place no-cost meal orders (subject to daily limits) |  |
| 24 | As a cook, I need the arrival of new orders to be clearly signaled |  |
| 25 | As a cook, I need to be able to select sub-components of an overall order |  |
| 26 | As a cook, I need to be able to logout |  |
| 27 | As a cook, I need default prep orders available at the start of the workday (cut up 10 lbs of onions, make 20 gallons of soup, etc.) (If time allows - - Stretch Goal) |  |
| 28 | As a cook, I need default cleanup orders to come up at the end of the shift (clean grill, mop floor, etc.)(If time allows - - Stretch Goal) |  |
| 29 | As a cook, I need the system to interface with external buttons (hit a large button for next order, complete order, etc.)(If time allows - - Stretch Goal) |  |
| 30 | As a cook, I need the next open order to be automatically selected when I complete the current order |  |
| 31 | As a cook, I need to see how long it has been since an order was placed |  |
| 32 | As a cook, I need to see how much more time I have to complete the order to be within my target time (if the admin should be able to say that most order should be completed within 10 minutes of ordering then the cook should see that they only have 5 minutes left to complete the order)(If time allows - - Stretch Goal) |  |
| 33 | As a cook, I need to see how much overage time an order has taken beyond the target time (if the target time is 10 minutes and it took 11 min 20 seconds to complete the system should show -1 min 20 seconds for target time remaining)(If time allows - - Stretch Goal) |  |
| 34 | As a cook, I need to see how much time remaining until my next break or end of shift(If time allows - - Stretch Goal) |  |
| 35 | As a waiter / waitress I need to have the duration of login work as a timecard (If time allows - - Stretch Goal) |  |
| 36 | As a waiter / waitress I need to be able to issue a new customer order-ID |  |
| 37 | As a waiter / waitress I need to place an order for a customer |  |
| 38 | As a waiter / waitress I need to identify which table / location an order relates to |  |
| 39 | As a waiter / waitress I need to be able to pull up an ingredient list for menu items (If time allows - - Stretch Goal) |  |
| 40 | As a waiter / waitress I need to be able to place zero cost orders (subject to approval) |  |
| 41 | As a waiter / waitress I need to get notified when certain orders are available for pickup from the kitchen (i.e. I don’t care about orders not in my section) |  |
| 42 | As a waiter / waitress I need to be able to select or be assigned to a section of locations / tables |  |
| 43 | As a waiter / waitress I need to know what locations / tables have service requests |  |
| 44 | As a waiter / waitress, I would like to switch a bill from one customer to another |  |
| 45 | As a waiter / waitress, I would like to split or combine different bills |  |
| 46 | As a waiter / waitress / cook, I would like to view items that are marked not available |  |
| 47 | As a waiter / waitress / customer, I would like to view the daily special menu items(If time allows - - Stretch Goal) |  |
| 48 | As a manager, I would like to designate particular menu items as a daily special(If time allows - - Stretch Goal) |  |
| 49 | As an employee, I would like to log in and out |  |
| 50 | As a manager, I would like to manage other user accounts |  |
| 51 | As a manager, I would like to delete, create, and manage menu items |  |
| 52 | As a manager, I would like to delete, moderate, and approve user feedback before display to other users |  |
| 53 | As a manager, I would like to be able to manage inventory |  |
| 54 | As a manager, I need moderate payment requirements for some order types. The orders can be set such that the customer must pay before an order is placed, that the customer must pay after they eat but before they leave, or for net 30 (or other terms).(If time allows - - Stretch Goal) |  |
| 55 | As a manager, I need the system to interface with my accounting system (inventory, payroll, etc.)(If time allows - - Stretch Goal) |  |
| 56 | As a manager, I need the system to interface with third party order and delivery systems like ChowHound, PostMates, etc.(If time allows - - Stretch Goal) |  |
| 57 | As a manager, I need to be able to override details about an open order (menu items, price, location, etc.) |  |
| 58 | As a manager, I should be able to pull up a history of any order. |  |
| 59 | As a manager, I need a daily summary report on all activity at the restaurant |  |
| 60 | As a manager, I need an inventory status report |  |
| 61 | As a manager, I need a projected inventory report based on current inventory levels and historical data (I.E. do I have enough inventory for tomorrow?) (If time allows - - Stretch Goal) |  |
| 62 | As a manager, I need to be able to mark a menu item as currently unavailable |  |
| 63 | As a manager, I want to be able to see customer feedback in near real-time. |  |
| 64 | As a manager, I want customer feedback translated into sentiment. (If time allows - - Stretch Goal) |  |
| 65 | Upon first time login, users will be able to login and subscribe to receive notifications of their choice within 60 seconds of the application loading. |  |
| 66 | Application shall be available on the Google Play Store.(If time allows - - Stretch Goal) |  |
| 67 | The app must allow for at least 4+ simultaneous users that are pulling information from the database while others are creating and submitting events to the database at any given time. |  |
| 68 | The app must follow best practices to prevent sql injection, cross site scripting attacks or other common hacking techniques that can harm an application. |  |
| 69 | This project shall utilize a two tier Client/Server architecture. I.e. will not use proxy server |  |
| 70 | The project will have a logical design of hub and spokes. |  |
| 71 | All communications between the clients and server will be encrypted. |  |
| 72 | Aside from the guest/customer view, all user views will be password protected. |  |
| 73 | All views shall use a session cookie (life to not exceed 24 hours) |  |
| 74 | The server will validate all user requests. |  |
| 75 | Unique transaction IDs are generated for every transaction. |  |
| 76 | Party name on orders can be blank |  |
| 77 | Server will provide data to mobile client as JSON (If time allows - - Stretch Goal) |  |
| 78 | Mobile app will handle formatting and presentation of server data. (If time allows - - Stretch Goal) |  |
| 79 | Server will provide formatting through html/css to clients using a web browser. |  |
| 80 | Order and inventory data will be preserved for a user specified amount of time. |  |
| 81 | Changes to orders must be maintained for auditability. |  |
| 82 | Old records must be purged from the system after a user specified amount of time. |  |
| 83 | It should be configurable to allow orders through or not depending on inventory levels. I.E. if the inventory shows you are out of soup then it would depend on the configuration if a customer could order a bowl of soup. |  |
| 84 | The system will support access cards or other tokens for login instead of just username and password (If time allows - - Stretch Goal) |  |
| 85 | The source code will undergo static analysis |  |
| 86 | Within 30 seconds from time of order, new orders will show up in the cook view |  |