# Documentation For WildCart Shopping List Web Application

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#### I. PROJECT CONVENTIONS

## A. Code Style Guide

The code style guides used to write code for the sprints were taken from https://www.w3schools.com/html/html5\_syntax.asp and https://www.w3schools.com/js/js\_conventions.asp for HTML and JavaScript respectively.

#### B. Code Review Guide

The code review guide used when reviewing code before merging pull requests was taken from https://github.com/thoughtbot/guides/tree/master/code-review.

## C. Backlog at Start of Project

TABLE I LIVE TABLE PRODUCT BACKLOG

Item	Estimation (Hours)	Priority	Status
As a user I want to add an entry to a list.	1	1	Not Started
As a user I want multiple carts.	1	2	Not Started
As a user I want to delete an entry in a list.	1	3	Not Started
As a user I want to sign up.	1	4	Not Started
As a user I want to sign in.	3	5	Not Started
As a user I want to edit an entry.	1	6	Not Started
As a user I want to add a category.	1	7	Not Started
As a user I want to select a category from a drop-down menu	1	8	Not Started
As a user I want to be able to share a list.	1	9	Not Started
As a user I want to logout.	1	10	Not Started
As a user I want an API feature such as a recipe book.	5	11	Not Started
As a user I want to check off items I have purchased.	1	12	Not Started
As a user I want to share my list on Twitter.	5	13	Not Started

## II. SPRINT ONE

## Release date: 26 April 2018

## A. Sprint Execution

The sprint began on 19 April 2018 and ended on 26 April 2018. A release was made on 26 April 2018. The release is available at: https://github.com/witseie-elen4010/Group-11-Lab/releases/tag/V1.0.0. The development team met two times, once for sprint planning and one time before the release in order to review and merge code together. The rest of the communication was carried out using a VoIP application. A meeting was held to review and merge code in order to establish a standard for the code review and to ensure that all members of the development team were knowledgeable regarding the process of reviewing the code and merging it into the trunk.

TABLE II
TABLE OF SPRINT BACKLOG AT START OF SPRINT ONE

Item	Estimation (Hours)
Database Design	3
Read User	1
Update a User	0.5
Create and Delete Users	0.5
Login Interface	5
Azure Deployment	0.5

TABLE III
TABLE OF STORY ASSIGNMENT FOR SPRINT ONE

Item	Developer	Reviewed and Merged by:
Database design	Arlo Eardley	Ryan Verpoort
Read user	Ryan Verpoort	Arlo Eardley
Update a user	Arlo Eardley	Ryan Verpoort
Create and delete users	Ryan Verpoort	Laura West
Login interface	Carel Ross	Arlo Eardley
Azure deployment	Arlo Eardley	Ryan Verpoort

## B. Sprint Backlog at End of Sprint One

The sprint backlog was empty at the end of the sprint.

Velocity: 10.5

TABLE IV
TABLE OF PRODUCT BACKLOG AT END OF SPRINT ONE

Item	Estimation (Hours)	Status
As a user I want to sign up.	1	Not Started
As a user I want to sign in.	3	Finished
As a user I want to logout.	1	Not Started
As a user I want to add an entry to a list.	1	Not Started
As a user I want to delete an entry in a list.	1	Not Started
As a user I want to add a category.	1	Not Started
As a user I want to select a category from a drop-down menu	1	Not Started
As a user I want to edit an entry.	1	Not Started
As a user I want an API feature such as a recipe book.	5	Not Started
As a user I want to be able to share a list.	1	Not Started
As a user I want multiple carts.	1	Not Started
As a user I want to share my list on Twitter.	5	Not Started
As a user I want to check off items I have purchased.	1	Not Started

#### C. Sprint One Retrospective

- This sprint was mainly oriented around the setup of the database and automated testing as well as deployment to Azure from Travis testing.
- There was initial confusion regarding the code reviews and merging the pull requests. Due to meeting for the code reviews and merges, one team member did not land up merging a pull request onto the trunk.
- This sprint developed a foundation that allowed for automated testing and ensured that all deployments to Azure would be correct.
- One developer was unable to contribute to the sprint in the form of a commit. The developer contributed by reviewing and merging a pull request. This will be improved upon in the next sprint by ensuring the developer commits code for the sprint.
- The sprint could be improved by adding basic implementation of bootstrap.

#### III. SPRINT TWO

# Release date: 3 May 2018

## A. Sprint Execution

The sprint began on 27 April 2018 and ended on 3 May 2018. A release was made on 3 May 2018. The release is available at: https://github.com/witseie-elen4010/Group-11-Lab/releases/tag/V2.0.0. The development team met once for sprint planning. The rest of the communication was carried out using a VoIP application.

TABLE V
SPRINT BACKLOG AT START OF SPRINT TWO

Item	Estimation (Hours)
Separation of routes	1
Back-end credential verification	5
Login	3
Logout	1
Login interface - CSS	1
CSS login file	0.5

Item	Developer	Reviewed and Merged by:
Separation of routes	Ryan Verpoort	Arlo Eardley
Back-end credential verification	Arlo Eardley	Carel Ross
Login	Ryan Verpoort	Laura West
Logout	Laura West	Ryan Verpoort
Login interface - CSS	Carel Ross	Ryan Verpoort
CSS login file	Carel Ross	Arlo Eardley

# B. Sprint Backlog at End of Sprint Two

The sprint backlog was empty at the end of the sprint.

Velocity: 11.5

 $\begin{tabular}{ll} TABLE\ VII \\ TABLE\ OF\ PRODUCT\ BACKLOG\ AT\ END\ OF\ SPRINT\ TWO \\ \end{tabular}$ 

Item	Estimation (Hours)	Status
As a user I want to sign up.	1	Not Started
As a user I want to sign in.	3	Finished
As a user I want to logout.	1	Finished
As a user I want to add an entry to a list.	1	Not Started
As a user I want to delete an entry in a list.	1	Not Started
As a user I want to add a category.	1	Not Started
As a user I want to select a category from a drop-down menu	1	Not Started
As a user I want to edit an entry.	1	Not Started
As a user I want an API feature such as a recipe book.	5	Not Started
As a user I want to be able to share a list.	1	Not Started
As a user I want multiple carts.	1	Not Started
As a user I want to share my list on Twitter.	5	Not Started
As a user I want to check off items I have purchased.	1	Not Started

#### C. Sprint Two Retrospective

- We have been deleting the branch when merging pull requests before Travis has built the current state of the program. This needs to be addressed in the next sprint.
- Should have focused on the carts functionality instead of login functionality.
- Velocity from sprint one to sprint two improved and we believe that we can improve this velocity further. Will plan accordingly in the next sprint planning.
- Spoke often using VoIP application, this ensured that everyone was on the same page regarding responsibilities towards stories.

# IV. SPRINT THREE

# Release date: 10 May 2018

## A. Sprint Execution

The sprint began on 4 May 2018 and ended on 10 May 2018. A release was made on 10 May 2018. The release is available at: https://github.com/witseie-elen4010/Group-11-Lab/releases/tag/V3.0.0. The development team met once for sprint planning. The rest of the communication was carried out using a VoIP application.

TABLE VIII
TABLE OF STORY ASSIGNMENT FOR SPRINT THREE

Item	Developer	Reviewed and Merged by:
Read carts	Ryan Verpoort	Arlo Eardley
Carts interface	Carel Ross	Arlo Eardley
Update database to include username and carts	Ryan Verpoort	Carel Ross
Create carts	Laura West	Ryan Verpoort
General bug fixes	Ryan Verpoort	Laura West
User registration	Arlo Eardley	Ryan Verpoort
Add carts bug fix	Arlo Eardley	Ryan Verpoort
Delete carts	Arlo Eardley	Laura West

TABLE IX
TABLE OF SPRINT BACKLOG AT START OF SPRINT THREE

Item	Estimation (Hours)
Read carts	1
Carts interface	3
Update database to include username and carts	1
Create carts	3
General bug fixes	0.5
User registration	1
Add carts bug fix	0.5
Delete carts	3
Update carts	3

# B. Sprint Backlog at End of Sprint Three

Velocity: 13

Item	Estimation (Hours)
Update carts	3

TABLE XI
TABLE OF PRODUCT BACKLOG AT THE END OF SPRINT THREE

Item	Estimation (Hours)	Status
As a user I want to sign up.	1	Finished
As a user I want to sign in.	3	Finished
As a user I want to logout.	1	Finished
As a user I want to add a list.	3	Finished
As a user I want to delete a list.	3	Finished
As a user I want to edit a list.	3	Not started
As a user I want to add an entry to a list.	1	Not started
As a user I want to delete an entry in a list.	1	Not started
As a user I want to add a category.	1	Not Started
As a user I want to select a category from a drop-down menu	1	Not Started
As a user I want to edit an entry.	1	Not Started
As a user I want to share my list.	1	Not Started
As a user I want an API feature such as a recipe book.	5	Not Started
As a user I want multiple carts.	1	Finished
As a user I want to share my list on Twitter.	5	Not Started
As a user I want to check off items I have purchased.	1	Not Started

# C. Sprint Three Retrospective

- Aimed too high with the velocity and had to leave the update carts in the product backlog. Will plan to achieve a velocity of 13 in the next sprint when sprint planning.
- Noticed that the variation in the project is high at this point and two of the developers need to be more active in committing for the next sprint. Therefore two of the developers will perform more stories in the sprint.
- All members committed code and merged pull requests.
- Delegation of tasks worked well as some developers had more responsibilities outside of the sprint than others.
- There were quite a few bug fixes that had to take place for add carts and there was a problem with the profile page routing.

# V. SPRINT FOUR

# Release date: 17 May 2018

# A. Sprint Execution

The sprint began on 11 May 2018 and ended on 17 May 2018. A release was made on 17 May 2018. The release is available at: https://github.com/witseie-elen4010/Group-11-Lab/releases/tag/V4.0.0.The development team met once for sprint planning. The rest of the communication was carried out using a VoIP application.

Item	Estimation (Hours)
Update carts	3
Create items	1
Read items	0.5
Bootstrap interface	5
Delete items	1
Items interface	1
Recipe API	5
General bug fixes	0.5
Update items	3
Recipe API interface	3
Share carts	1

TABLE XIII
TABLE OF STORY ASSIGNMENT FOR SPRINT FOUR

Item	Developer	Reviewed and Merged by:		
Update carts	Ryan Verpoort	Laura West		
Create items	Laura West	Carel Ross		
Read items	Laura West	Arlo Eardley		
Bootstrap interface	Carel Ross	Arlo Eardley		
Delete items	Laura West	Ryan Verpoort		
Items interface	Carel Ross	Ryan Verpoort		
Recipe API	Laura West	Ryan Verpoort		
General bug fixes	Arlo Eardley	Carel Ross		
Update items	Arlo Eardley	Laura West		
Recipe API interface	Carel Ross	Arlo Eardley		
Share carts	Ryan Verpoort	Laura West		

## B. Sprint Backlog at End of Sprint Four

The sprint backlog was empty at the end of the sprint. Velocity: 13

 $\label{table} \textbf{TABLE XIV}$  TABLE OF PRODUCT BACKLOG AT END OF SPRINT FOUR

Item	Estimation (Hours)	Status
As a user I want to sign up.	1	Finished
As a user I want to sign in.	3	Finished
As a user I want to logout.	1	Finished
As a user I want to add a list.	3	Finished
As a user I want to delete a list.	3	Finished
As a user I want to edit a list.	3	Finished
As a user I want to add an entry to a list.	1	Finished
As a user I want to delete an entry in a list.	1	Finished
As a user I want to add a category.	1	Finished
As a user I want to select a category from a drop-down menu	1	Finished
As a user I want to edit an entry.	1	Finished
As a user I want an API feature such as a recipe book.	5	Finished
As a user I want to be able to share a list.	1	Finished
As a user I want multiple carts.	1	Finished

# C. Sprint Four Retrospective

- Communication was consistent using the VoIP application and everyone was on the same page.
- The two developers responsible for high variation up until the end of sprint three worked hard to fix the variation.
- The product backlog was completed such that all items have finished status in the product backlog. The full product is ready for release.
- Improvements could be made to the entire sprint process by doing more rigorous sprint planning at the beginning of the project. Some small mistakes were made with the ordering of user stories and the sprints they occurred in.
- Better trunk commits for the full sprint could have been used. A lot of branches were used.

TABLE XV
TABLE OF OVERVIEW OF PROJECT

Developer	Number of User Sto- ries
Ryan Verpoort	7
Arlo Eardley	6
Carel Ross	6
Laura West	6

Variation: 1.17

#### VI. TESTING

The user CRUD testing involved the following tests:

- Retrieving items from the database where all items from the database should be accessible
- Insert items into the database where an item should be inserted in the item details table
- Deleting a user should delete the correct user from the users table
- The users details should be update-able by using the user ID to update the user table

Credential verification testing involved the following tests:

- Password verification is tested by ensuring that the passwords match
- The correct user password should allow the web page to then continue
- The incorrect user password should prevent the web page to continue
- All fields not being filled out should prevent the web page to continue

Cart CRUD testing involved the following tests:

- Inserting a cart for a user should insert a cart for the specified user in the database
- Deleting a cart for a user should delete a cart for the specified user in the database
- Reading a cart and all its items for a user should read a cart for the specified user in the database
- Updating a cart for a user should update all changes to a cart for the specified user in the database

Item CRUD testing involved the following tests:

- Inserting an item for a user cart should insert an item for the specified user cart in the database
- Deleting an item for a user cart should delete an item for the specified user cart in the database

Recipe API testing involved the following tests:

- A list of recipes from ingredients should be able to be retrieved
- A list of ingredients should be able to be retrieved from a selected recipe

Cart sharing testing involved the following tests:

- The cart should be able to be shared with another user of the site
- The user should not be able to share a cart with themselves

# VII. USER STORY MAP

USER ACTIVITIES	Database		Login			Cart			
USER STORIES	Database Design Update User	Read User  Create and Delete users	Login Interface						
	Release 2	Separation of Routes	Back-end credential verification	Login					
			Logout	Login Interface					
			CSS Login File						
	Update Database to include username and carts		User Registration		R	ead Carts	Carts Interface	Delete carts	
						Create Carts	Add carts bug fix		
	Release 4					Update Carts	Create Items	Recipe API	Recipe API Interface
					R	ead Items	Delete Items	ltems Interface	Update Items
					S	hare Carts			