

1.Sprint Planning and development :

1. Project team: Product Owner (PO): Alan
Scrum Master (SM): Eric
Team members (TM): Penny Enril

The product owner's responsibilities are to have a vision of what he or she wishes to build and convey that vision to the scrum team.

Scrum Master is the person who is responsible for facilitating/coaching the Development Team and the Product Owner to work on the day to day development activities.

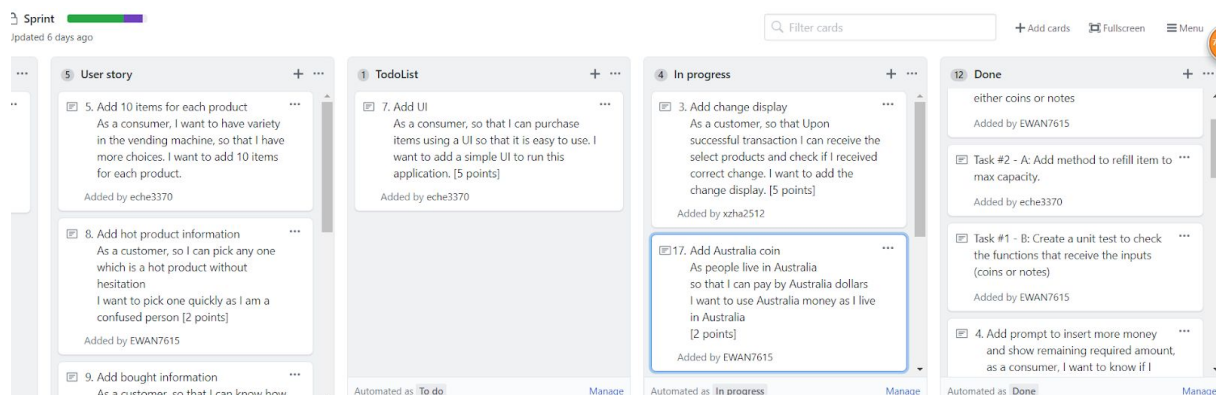
Team members are responsible for development and delivery, also for tasking and providing estimations.

For example, our product owner will give the expectations of the project and discuss the mission and problems with the scrum master. When a user story was written which followed the product owner requirement, then the scrum master will host a scrum meeting with the product owner and team member. The scrum master should assign the task and discusses the details of each realization of the task with the team members. If a team member meets any problems, he or she can find help with other members or scrum master. And if this problem is so hard, then scrum master should discuss with the product owner.

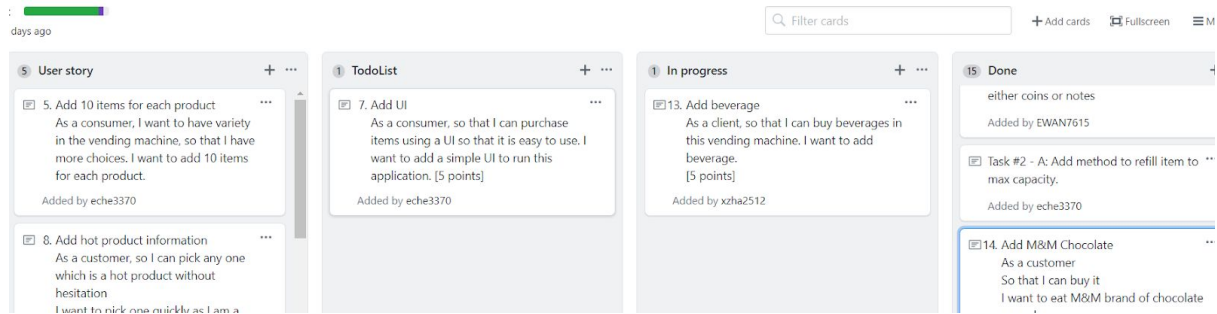
2. Sprint Goal:

The sprint goal is the items from the "Product Backlog". A Sprint goal shows the desired outcome of an iteration that provides a shared goal to the team, which has to be defined before the team starts the Sprint in order to focus on achieving this goal. Our Sprint Goal in the second sprint is to complete the rest of functions to fulfill the perfect vending machine

3. Task Board: Product and Sprint Backlog



Above screenshot showed we started to add new function in this sprint, and move the user story to in progress list



The above screenshot showed that after finished function, then put them in the Done list

Product Backlog: is compiled of all the things that must be done to complete the whole project. But it is not just a simple list. An effective product backlog breaks down each of the items on the list into a series of steps that help the development team.

Sprint Backlog: is like a subset of the product backlog. The sprint backlog comes from the product backlog, but it contains only that item, or those items, that can be completed during each sprint. Think of it as the marching orders for the team as they go off on their short sprint.

After the sprint planning meeting, we created our product backlog and our Sprint backlog in GitHub projectoi, and added tasks to each sprint goal, pushing it to the to-do list in each sprint so that the development members can push it to the in-progress list and then pushing the goal to the done list when finished.

4. Scrum Artefacts

Estimating size:90 points

Following is team members and scrum master and product owner discuss the points of each item.

Add a cancel option: As a client, so that I can cancel my previous choices. I want to add a cancel option.

4 Players
voted
Avg: 2.4

1
25 % (1 player)

3
25 % (1 player)

5
25 % (1 player)

1/2
25 % (1 player)

Active Stories 7

Completed Stories 3

All Stories 10

+ New

Edit

TITLE:

EST.:

TIME.:

Story voting completed

Players: 00:00:19

enchen wang 00:00:06 1/2

eric chen 00:00:10 5

Penny Zhang 00:00:13 3

ALAN JIA 00:00:07 1

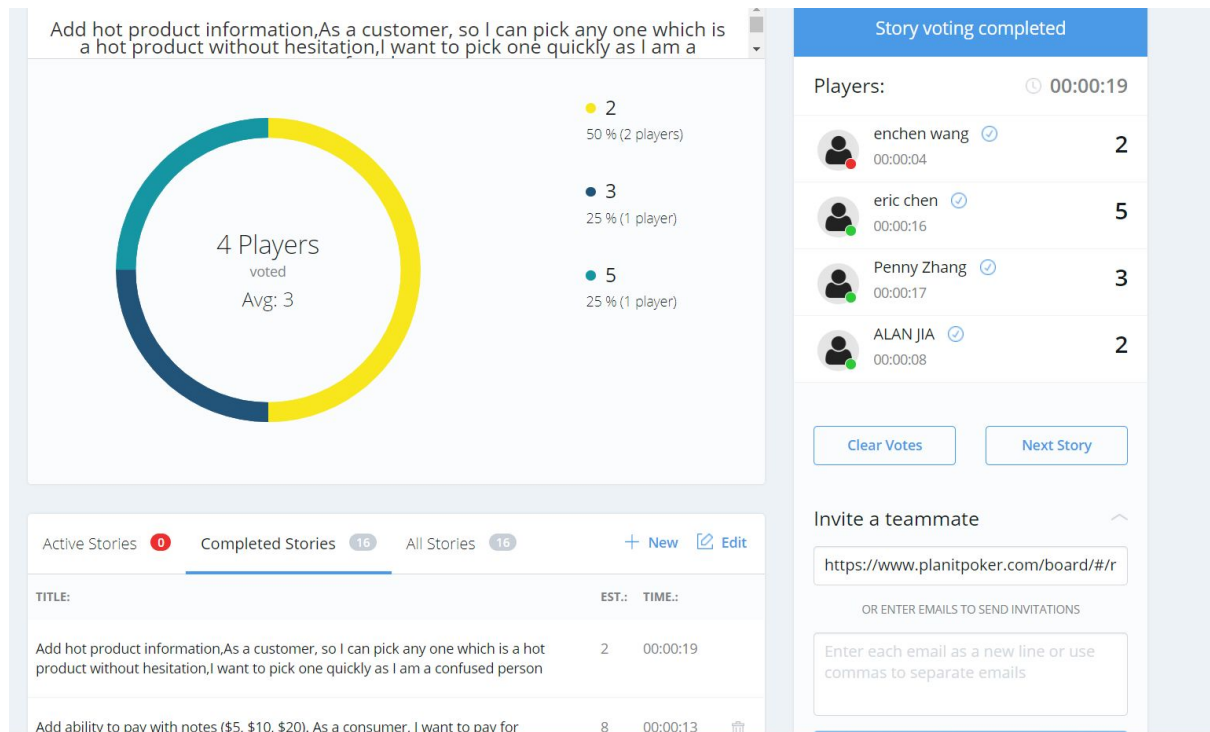
Clear Votes

Next Story

Invite a teammate

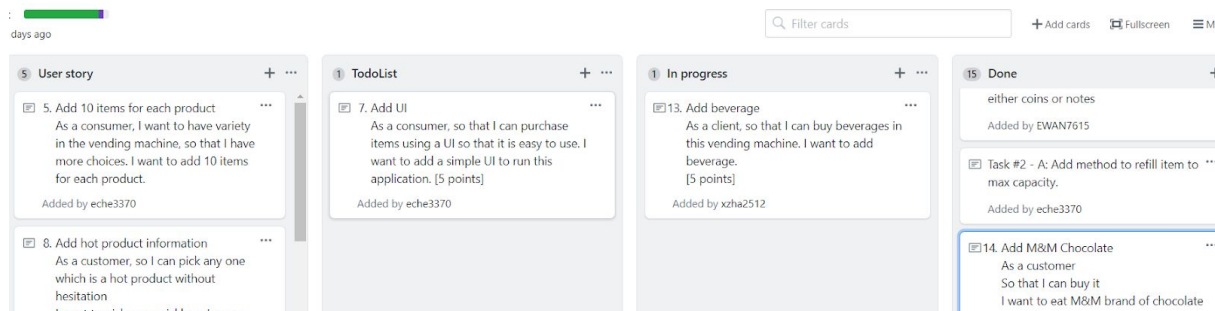
https://www.planitpoker.com/board/#/r

TITLE:	EST.:	TIME.:
Add M&M ChocolateAs a customerSo that I can buy it I want to eat M&M brand of chocolate everyday	5	00:00:13
Add BBQ Chips,As a BBQ flavor and Chips FanSo that I can buy and eat happier,I want to buy it in vending machine	5	00:00:08
Add Chips,As Chips fan,so that I can eat Chips anywhere,I want to get Chips outside the supermarket	3	00:00:12
Add UI, as a consumer, so that I can purchase items using a UI so that it is easy to use. I want to add a simple UI to run this application.	5	00:00:17
Add using coins, as a consumer with spare coins, so that I can pay using coins, I want to add the ability to use coins to pay for items.	5	00:00:24
Add beverage: As a client, so that I can buy beverages in this vending machine. I want to add beverage.	5	00:00:16
Add reports: As a staff, so that I can know vending machine performance. I want to print Daily transactions including transaction Id, date and time, items sold, amount of money paid, returned change.	13	00:00:29



We evaluate points for each item and plan to achieve 90 points total in three weeks, and in these three weeks, each person will pick any item to finish, and we had scrum meeting twice a week through wechat. Ensure we keep the progress and can finish the whole project in three weeks.

Following is the board records our user story and the process of each item



Description of challenges and how to resolve:

In the second sprint, we meet the test problems. When wrote the Start() method test, it is hard to test because there is a infinite loop in our code,

In the first sprint, we meet many problems, the first and important is the time pressure, In one week, we should finish 30 points load, and also, every time we commit our

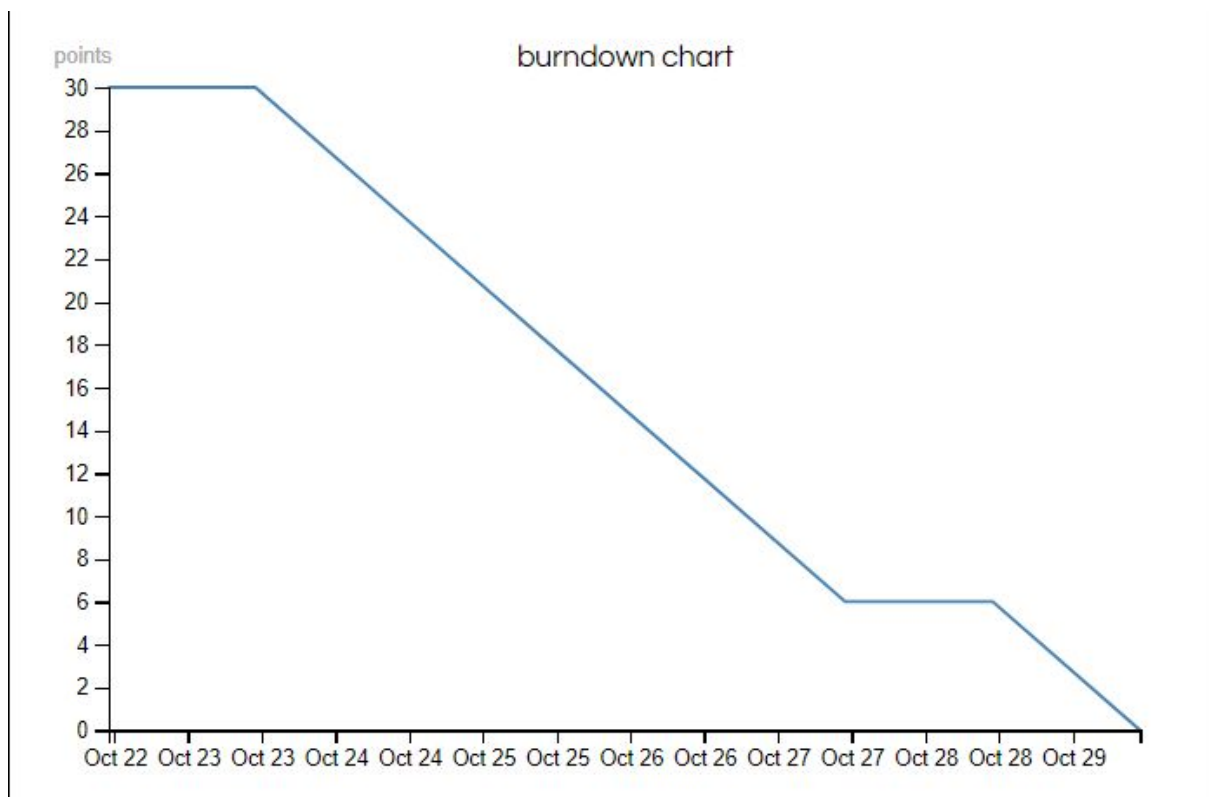
code to GitHub, we need to test it by using CI/CD, so we should create Jenkins and much other stuff. We all agree that the first sprint has biggest time pressure. And we also meet technology challenges, such as how to decide the payment method for the customer and how to write this function. After discussing with team members, and we all think this challenge as a priority, then we work it out together.

We using Wechat for scrum meeting:

Product owner gave the expectation to the development team, scrum master shared the work that team has done until now and discussed what we should do next sprint

We assigned each task to each person, discussed the difficulties of each task and the potential bugs and problems we will be facing

Following is the burndown chart



We worked at 23 - 27 Oct and 28 - 29 Oct and finished 30 points

During our first sprint, we have finished the basic functions of our vending machine, customers can choose the item that they want and choose if they want to choose another item they can. The vending machine will show the total price of their items and the customers can either insert coins(10c, 20c, 50c, \$1, \$2) and notes (\$5, \$10, \$20). The vending machine will show how much more they need to pay or how much change they will get. If the customers don't have enough money they can also choose to cancel the purchase.

```
BBQChips - Name: BBQChips      Code:1
Jellybeans - Name: Jellybeans   Code:2
Juice - Name: Juice             Code:3
Lollies - Name: Lollies         Code:4
Mars - Name: Mars               Code:5
OriginalChips - Name: OriginalChips Code:6
Sneakers - Name: Sneakers       Code:7
SourWorms - Name: SourWorms     Code:8
Water - Name: Water             Code:9

Please input the product name or code of snack.
1
Do you want to add another item? Type 0 for yes, 1 for no
1
The total price is $2.50
Please pay with coins (10c, 20c, 50c, $1, $2) and notes ($5, $10, $20)
You have to pay with currency values listed above. To pay with dollars, just enter the amount. To pay with cents, enter the amount and add the character c at the end.
To cancel transaction, type in cancel.
cancel
Here is your money back.

Next customer.
```

2. Agile Development

```
eric@DESKTOP-CM80IEM MINGW64 ~/Documents/vending machine/Assignment2---team33 (master)
$ git merge Eric
Auto-merging src/main/java/VendingMachine.java
CONFLICT (content): Merge conflict in src/main/java/VendingMachine.java
CONFLICT (modify/delete): out/production/classes/VendingMachine.class deleted in Eric and modified in HEAD. Version HEAD of out/production/classes/VendingMachine.class left in tree.
CONFLICT (modify/delete): out/production/classes/Menu.class deleted in Eric and modified in HEAD. Version HEAD of out/production/classes/Menu.class left in tree.
Removing build/classes/java/main/testing.class
Auto-merging .idea/workspace.xml
CONFLICT (content): Merge conflict in .idea/workspace.xml
Automatic merge failed; fix conflicts and then commit the result.
```



```

eric@DESKTOP-CM80IEM MINGW64 ~/Documents/vending machine/Assignment2---team33 (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   .idea/workspace.xml
        modified:   src/main/java/Menu.java

no changes added to commit (use "git add" and/or "git commit -a")

eric@DESKTOP-CM80IEM MINGW64 ~/Documents/vending machine/Assignment2---team33 (master)
$ git add -A

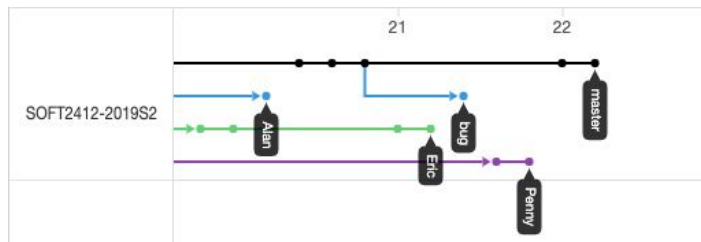
eric@DESKTOP-CM80IEM MINGW64 ~/Documents/vending machine/Assignment2---team33 (master)
$ git commit -m "added calculating remaining pay amount"
[master fdecf8a] added calculating remaining pay amount
 2 files changed, 118 insertions(+), 194 deletions(-)

eric@DESKTOP-CM80IEM MINGW64 ~/Documents/vending machine/Assignment2---team33 (master)
$ git push origin master
Enumerating objects: 15, done.
Counting objects: 100% (15/15), done.
Delta compression using up to 8 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (8/8), 2.41 KiB | 618.00 KiB/s, done.
Total 8 (delta 4), reused 2 (delta 1)
remote: Resolving deltas: 100% (4/4), completed with 4 local objects.
To https://github.sydney.edu.au/SOFT2412-2019S2/Assignment2---team33.git
 dfe377d..fdecf8a  master -> master

```

1. Development tools and practices

By using Jenkins and webhook to automatically test



using branch in github to coding in

second Sprint

SOFT2412-2019S2 / Assignment2---team33 Private

Watch 0 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 1 Wiki Insights Settings

Options
Collaborators & teams
Branches
Hooks
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Deploy keys
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Webhooks

Add webhook

Webhooks allow external services to be notified when certain events happen. When the specified events happen, we'll send a POST request to each of the URLs you provide. Learn more in our [Webhooks Guide](#).

We will also send events from this repository to your [organization webhooks](#).

✓ <https://8535ba00.ngrok.io/github-webhook/> (push)
 Edit Delete

Pre-receive hooks

```

BUILD SUCCESSFUL in 29s
7 actionable tasks: 7 executed
C:\Users\ASUS\test>gradle build --console verbose
> Task :compileJava UP-TO-DATE
> Task :processResources NO-SOURCE
> Task :classes UP-TO-DATE
> Task :jar UP-TO-DATE
> Task :startScripts UP-TO-DATE
> Task :distTar UP-TO-DATE
> Task :distZip UP-TO-DATE
> Task :assemble UP-TO-DATE
> Task :compileTestJava UP-TO-DATE
> Task :processTestResources NO-SOURCE
> Task :testClasses UP-TO-DATE
> Task :test UP-TO-DATE
> Task :check UP-TO-DATE
> Task :build UP-TO-DATE

```

-we using commands like gradle build and gradle run, and gradle build test

gradle build test will run the test code to junit test

gradle run will run build.gradle

gradle build will build jar file

Use JUnit to test basic snack get and set functions. Run gradle build test and gradle build JacocoTestReport to generate reports

```

BUILD SUCCESSFUL in 3s
5 actionable tasks: 1 executed, 4 up-to-date
vlan-2659-10-19-230-68:Assignment2---team33 PennyZhang$ gradle build test

BUILD SUCCESSFUL in 1s
4 actionable tasks: 4 up-to-date
vlan-2659-10-19-230-68:Assignment2---team33 PennyZhang$ gradle build JacocoTestReport

```

snacks

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
Snack	<div><div></div></div>	100%		n/a	0	7	0	13	0	7	0	1
OriginalChips	<div><div></div></div>	100%		n/a	0	1	0	5	0	1	0	1
SourWorms	<div><div></div></div>	100%		n/a	0	1	0	5	0	1	0	1
Sneakers	<div><div></div></div>	100%		n/a	0	1	0	5	0	1	0	1
Juice	<div><div></div></div>	100%		n/a	0	1	0	5	0	1	0	1
Jellybeans	<div><div></div></div>	100%		n/a	0	1	0	5	0	1	0	1
Lollies	<div><div></div></div>	100%		n/a	0	1	0	5	0	1	0	1
BBQChips	<div><div></div></div>	100%		n/a	0	1	0	5	0	1	0	1
Mars	<div><div></div></div>	100%		n/a	0	1	0	5	0	1	0	1
Water	<div><div></div></div>	100%		n/a	0	1	0	5	0	1	0	1
Total	0 of 141	100%	0 of 0	n/a	0	16	0	58	0	16	0	10

sss

Element	Missed Instructions	Cov.	Missed Branches	Cov.	Missed	Cxty	Missed	Lines	Missed	Methods	Missed	Classes
default	<div><div></div></div>	0%	<div><div></div></div>	0%	43	43	147	147	13	13	5	5
snacks	<div><div></div></div>	100%		n/a	0	16	0	58	0	16	0	10
Total	844 of 985	14%	60 of 60	0%	43	59	147	205	13	29	5	15

Class TestCase

all > default-package > TestCase

4

tests

0

failures

0

ignored

0.009s

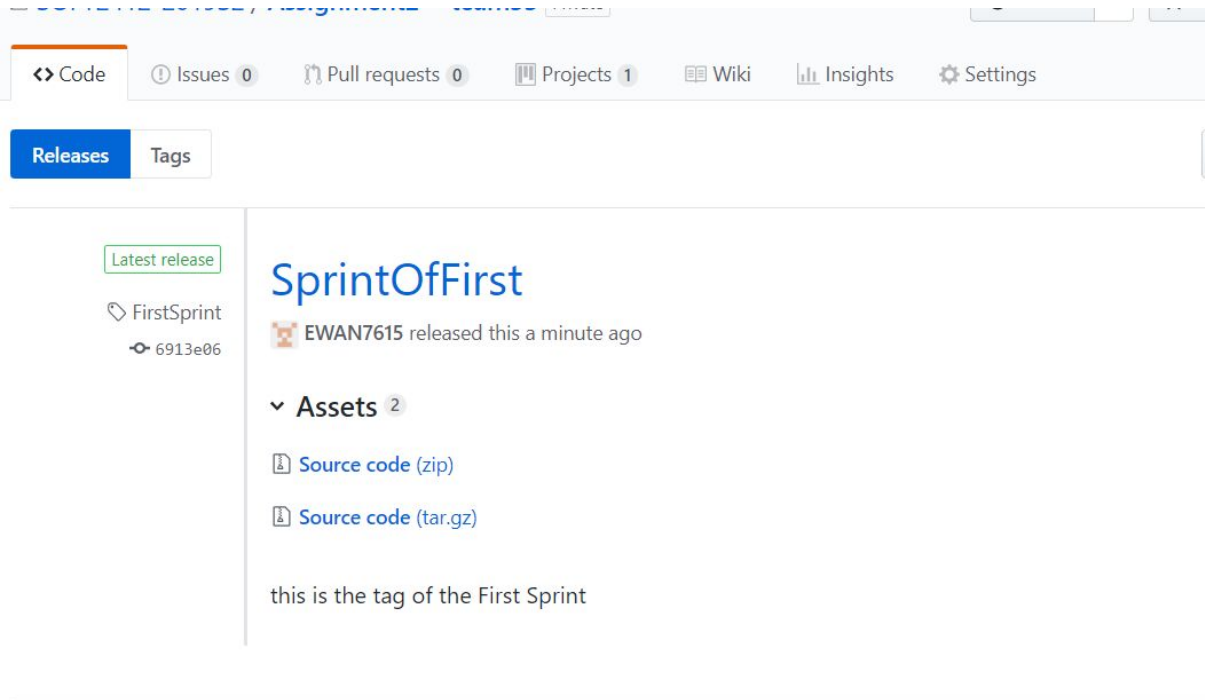
duration

100%

successful

Tests

Test	Duration	Result
TestSetAndGetSnakeCode	0s	passed
TestSetAndGetSnakeName	0s	passed
TestSetAndGetSnakePrice	0.002s	passed
TestSnacks	0.007s	passed



Finally, we release our version at the end of First Sprint.