# Team Byte Me

## TEAM 07

# Deliverable 3 Part 1

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Ruixin Zhuang
Xinyi Chen
Min Qi Zhang

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# Environment Setup

**Q: What tools will you use for your task board?**

**A:** We are using ZenHub Board as our task board since it can nicely integrate with GitHub. However, we want to note that there will be some tasks with an "Epic" tag under a blue background in screenshots of our task board. We are aware that there should be no epics in our sprint backlog. We are just using this feature in ZenHub Board to group tasks into one user story and have story points (estimates) calculated automatically. Actual "Epics" have "[Epic]" in the title, and tasks have "[#user story]" in the title. If there are no prefixes, then it is a user story.

**Q: What tools will you use for your burn-down chart?**

**A:** We will use ZenHub for our burn-down chart since ZenHub can automatically generate the burn-down chart based on the tasks and user stories on the task board.

**Q: Who will maintain the burn-down chart? How?**

**A:** Min Qi Zhang is responsible for maintaining and submitting the burn-down chart every 48 hours to the GitHub repository. By the end of each day (before 11:59 pm), she will receive the updates from all the team members, then she will update the points on the burn-down chart.

**Q: What is every team member's role?**

**A:**

- Yiyang Zhou is responsible for submitting the deliverables to the GitHub repository.
- Yifei Yin is the scrum master of our team. His primary responsibilities are solving the technical problems for team members, hosting standup meetings to get updates of the progress and ensuring team members are following scrum processes.
- Ruixing Zhuang is responsible for contacting the TA to ask any questions regarding the project.
- Xinyi Chen is responsible for taking the brief notes, taking the meeting attendance and keeping track of time for meetings.
- Min Qi Zhang is responsible for maintaining and submitting the burn-down chart every 48 hours to the GitHub repository.

**Q: What tools, if any, will you use for communication?**

**A:** We will use WeChat and Discord for communication. We have a WeChat group discussing any aspect of our project, such as consulting the team members' ideas, posting the announcements, and sharing the information about the client meetings. We mainly use Discord for weekly meetings. By using Discord, we can conduct voice calls and screen sharing to improve our meetings' productivity and efficiency.

**Q: When do you plan to meet in person?**

**A:** Due to the current circumstances, we are not able to meet in person, and thus, we do not plan to meet in person. Besides the weekly meeting with the TA at 3:00 pm on Thursday, we hold our weekly meeting every Saturday at 4:00 pm.   If necessary, we will arrange additional meetings.

**Q: How will you use your repository on GitHub?**

**A:** We are using GitHub to store and submit assignments as directed by the course. That includes project deliverables (stored in a folder named Deliverables), burn-down charts and task board snapshots (stored in a folder named Burn-Down Chart & Task Board), project source code (stored in folders named backend and frontend-*).

We will have one main branch called "master." Members should create a feature branch with appropriate naming (see team agreement) from the master branch. They should then do feature development and commit their changes to the branch. They need to create a pull request on GitHub and may request another member to review and give feedback about their changes along the way. Finally, their last changes must be reviewed by another member. The author and reviewer(s) are both responsible for this merge; they need to make sure this merge commit does not unintentionally break other prominent features.

**Q: Which machines will be used for development by each team member?**
**A:**

| Name | MacBook | Linux Laptop | Windows Laptop | Windows Home Computer |
|---|---|---|---|---|
| Yiyang Zhou | √ | | √ | |
| Yifei Yin | √ | | | |
| Ruixin Zhuang | | √ | | √ |
| Xinyi Chen | √ | | | |
| Min Qi Zhang | | | √ | √ |

**Q: What is your DoD (definition of done)?**
**A:**
1. Changes have fulfilled the acceptance criteria.
2. Changes have been style-checked.
3. Changes have been reviewed by at least one other team member.
4. Changes do not break other functionalities unless explicitly specified.
5. Changes are merged back into the master branch and are ready to be released.

# Product Backlog

There are four levels of priority in our project:

- 0 emergency priority
- 1 high priority
- 2 medium priority
- 3 low priority

We normally do not assign priority 0 at the planning stage.

# User Stories

## Customers

### View Restaurants and Promotions

**#3** As Jerry (a customer), I want to see a list of all the restaurants, so I can find the ones that attract me. (Estimated Cost: 5; Priority: 1)

**#4** As Jerry (a customer), I want to search restaurants by their names, so that I can find restaurants that I know. (Estimated Cost: 3; Priority: 3)

**#5** As Jerry (a customer), I want to check restaurants near my location, given a specific range. (Estimated Cost: 4; Priority: 3)

**#6** As Jerry (a customer), I want to see a list of available promotions, so that I can participate and get benefits. (Estimated Cost: 3; Priority: 2)

**#7** As Jerry (a customer), I want to sort promotions by the expiration dates, so that I will not miss any coupons. (Estimated Cost: 3; Priority: 2)

**#8** As Jerry (a customer), I want to see all the current promotions of a specific restaurant. (Estimated Cost: 3; Priority: 1)

### Participate in Promotions

**#10** (Epic) As Jerry (a customer), I want to earn points and coupons from accomplishing achievements. (Estimated Cost: 4; Priority: 1)

### View Coupons and Achievements

**#13** As Jerry (a customer), I want to browse all coupons available for me. (Estimated Cost: 2; Priority: 1)

**#14** As Jerry (a customer), I want to sort my coupons according to their expiration dates. (Estimated Cost: 3; Priority: 3)

**#16** As Jerry (a customer), I want to filter my coupons according to the restaurant types. (Estimated Cost: 3; Priority: 3)

**#18** As Jerry (a customer), I want to see obtained achievements for each restaurant. (Estimated Cost: 3; Priority: 3)

**#19** As Jerry (a customer), I want to see my current available points at a specific restaurant and items that I can redeem with my points. (Estimated Cost: 5; Priority: 3)

**#21** As Jerry (a customer), I want to use coupons at check-out, so that I can get discounts from restaurants. (Estimated Cost: 4; Priority: 1)

**#22** As Jerry (a customer), I want to purchase coupons and items with my points. (Estimated Cost: 3; Priority: 3)

# Restaurant Owners

## Validate Coupons and Promotions

**#29** As Alice/Bob (restaurant owners), I want to check if a customer has satisfied our promotion requirements within 10 seconds. (Estimated Cost: 3; Priority: 1)

**#28** As Alice/Bob (restaurant owners), I want to validate customers' coupons within 10 seconds. (Estimated Cost: 3; Priority: 1)

## View Promotions

**#27** As Alice/Bob (restaurant owners), I want to filter promotions according to their status (upcoming, active or expired). (Estimated Cost: 3; Priority: 3)

## Rewards and Points

**#20** As Bob (a restaurant owner), I want to be able to customize rewards for an achievement: give customers 100 points (more details specified below) or give them coupons (such as 20% off on any order, 5 dollars off on ordering this item) which they can use at our restaurant (Estimated Cost: 6; Priority: 3)

**#17** As Bob (a restaurant owner), I want to set what customers can redeem with their points. For example, they can redeem a free ice cream with 300 points or get a 50% off coupon with 200 points. (Estimated Cost: 6; Priority: 3)

**#15** As Bob (a restaurant owner), I want to start a promotion collaboratively with other restaurant owners, and customers can get interchangeable coupons across both of the restaurants. (Estimated Cost: 6; Priority: 3)

## Analytics

**#12** As Bob (a restaurant owner), I want to see the demographics (age, gender and food preference) of my customers. (Estimated Cost: 5; Priority: 3)

**#11** As Bob (a restaurant owner), I want to see how many people are participating in each of the promotions, so that I know which ones are more attractive. (Estimated Cost: 2; Priority: 3)

**#9** As Bob (a restaurant owner), I want to see how many people have obtained each of the coupons, so that I know which ones are more attractive. (Estimated Cost: 4; Priority: 3)

# Changes to Our Product Backlog

1. We have converted user story #25 to a task, as it is a task of the user story #23. Specifically, starting and expiring dates are part of the rules.
   a. "As Alice/Bob (restaurant owners), I want to be able to add starting dates and expiring dates, so that I can schedule promotions in advance and set a deadline for promotions." (#25)
   b. "As Bob (a restaurant owner), I want to customize rules for a promotion. For example, order one item from each of three categories within ten days." (#23)
2. We have added user story #39 to our product backlog.
   a. "As Alice/Bob (restaurant owners), I want to be able to see a list of promotions that I have posted." (#39)

# Release Plan

## Length of Sprints

We choose the length of our sprints to be one week. Usually, the duration for a sprint is between two weeks to four weeks. However, since we only have two months left for this semester, we have to shorten the sprint duration to seven days.

If we have three-week-long or four-week-long sprints, the stakeholders will only participate in two demos before the entire project is finished. We can not receive enough feedback to mitigate the risks. If we have two-week-long sprints, we will not be able to present our first release before the next interview, which is on July 2. That is the reason why we choose our length of sprints to be seven days.

# Sprint Plan

## Sprint Backlog

**#31** As Alice/Bob (restaurant owners), I want to be able to login to the system with my email and password. (Total Estimated Cost: 8; Priority: 1)


Tasks
- **#30** Set up the backend server & database and have one working API endpoint (Estimated Cost: 3)
- **#32** Create the UI for the login section (Estimated Cost: 3)
- **#33** Validate the password with the data stored in the backend (Estimated Cost: 2)


Acceptance Criteria
- Given that Alice and Bob (as restaurant owners) want to use our product, when they open the login page, then there should be two input fields on the page for email and password.
- Given that Alice and Bob (as restaurant owners) have filled in the email and password correctly, when they click on the "Login" button, then they should be directed to the home page.
- Given that Alice and Bob (as restaurant owners) have filled in the email and password incorrectly, when they click on the "Login" button, then an error message shows up.




**#39** As Alice/Bob (restaurant owners), I want to be able to see a list of promotions that I have posted. (Total Estimated Cost: 2; Priority: 1)

Acceptance Criteria
- Given that Alice and Bob (as restaurant owners) have logged into the system and there are promotions created for this restaurant, when they are on the promotions page, then they should see a list of all promotions.
- Given that Alice and Bob (as restaurant owners) have logged into the system and there are no promotions created for this restaurant, when they are on the promotions page, then they should see a text saying there are no promotions.

**#26** As Alice/Bob (restaurant owners), I want to be able to create promotions with customizable titles, images, descriptions and other relevant information, so that promotion looks attractive, and rules are clear and transparent. (Total Estimated Cost: 6; Priority: 1)

Tasks
- **#34** Create the UI of "create promotion" page (Able to add title, description and rewards and to upload images) (Estimated Cost: 4)
- **#35** Save promotions (including the subtasks it contains) in the database (Estimated Cost: 2)

Acceptance Criteria
- Given that Alice and Bob (as restaurant owners) are on the home page, when they click on the "Create a Promotion" button, then they should be directed to the "create promotion" page.
- Given that Alice and Bob (as restaurant owners) are on the "create promotion" page, when they click on "Add a Subtask" button, then a popup should appear for them to enter information for subtasks.
- Given that Alice and Bob (as restaurant owners) are on the "create promotion" page, when they click on the "Upload Images" button, then a popup should appear for them to pick and upload images for this promotion.
- Given that Alice and Bob (as restaurant owners) are on the "create promotion" page, when they click on the "Remove Images" button, then the relevant image should be removed.
- Given that Alice and Bob (as restaurant owners) are on the "create promotion" page and are done with filling in all the fields and creating all the subtasks, when they click on the "Post a Promotion" button, then they should be directed to the summary page to get the full summary of their complete form filled.
- Given that Alice and Bob (as restaurant owners) are on the "create promotion" page, when they click on the "Discard a Promotion" button, then the promotion is discarded.
- Given that Alice and Bob (as restaurant owners) are on the "create promotion" page with problematic input, when they click on the "Post a Promotion" button, then a proper error message shows up informing them what field(s) have problematic input.

**#23** As Bob (a restaurant owner), I want to customize rules for a promotion. For example, order one item from each of three categories within ten days. (Total Estimated Cost: 5; Priority: 1)

Tasks
- **#36** Add functionality of creating/deleting subtasks (Estimated Cost: 3)
- **#40** Add functionality of setting starting and expiration dates for promotions (Estimated Cost: 2)

Acceptance Criteria

- Given that Bob (as restaurant owner) wants to add a subtask to the promotion, when he clicks on the "Add a Subtask" button, then a popup should show up with a text box to enter the description.
- Given that Bob (as restaurant owner) has customized a subtask, when he clicks on the "Save" button, then this customized subtask is shown on the promotion template.
- Given that Bob (as restaurant owner) wants to set starting and expiration dates, when he clicks on the starting date or expiration date, then a date selection box should show up.
- Given that Bob (as restaurant owner) wants to set a limit on how long customers need to complete the tasks once started, when he clicks on "Validate for …", then a date duration selection box should show up.
- Given that Bob (as restaurant owner) has set updates for promotions, when the real world time changes, the status of promotions should be changed to "Expired/Activated" in the database accordingly.

**#24** As Alice (a restaurant owner), I want to set rules for promotion by picking from a list of presets. For example, visit the restaurant ten times within a month. (Total Estimated Cost: 5; Priority: 1)

Tasks
- **#37** Popup for a preset customization form for each template (Estimated Cost: 2)
- **#38** Add some presets templates for tasks, including (Estimated Cost: 3)
    - N-th visit
    - Order X specific drinks
    - Visit N times within X days
    - Spend X dollars in an order
    - Buy X get Y free

Acceptance Criteria
- Given that Alice (as restaurant owner) wants to select a preset, when she clicks on the "Preset Templates" button, then a list of presets are displayed with a thumbnail and a brief description of the template.
- Given that Alice (as restaurant owner) wants to use a preset for her task, when she chooses a preset template, then a preset customization form pops out for easy template setup.
- Given that Alice (as restaurant owner) completed the preset customization form, when she clicks "Finish," then subtasks are loaded accordingly in the promotion creation page.
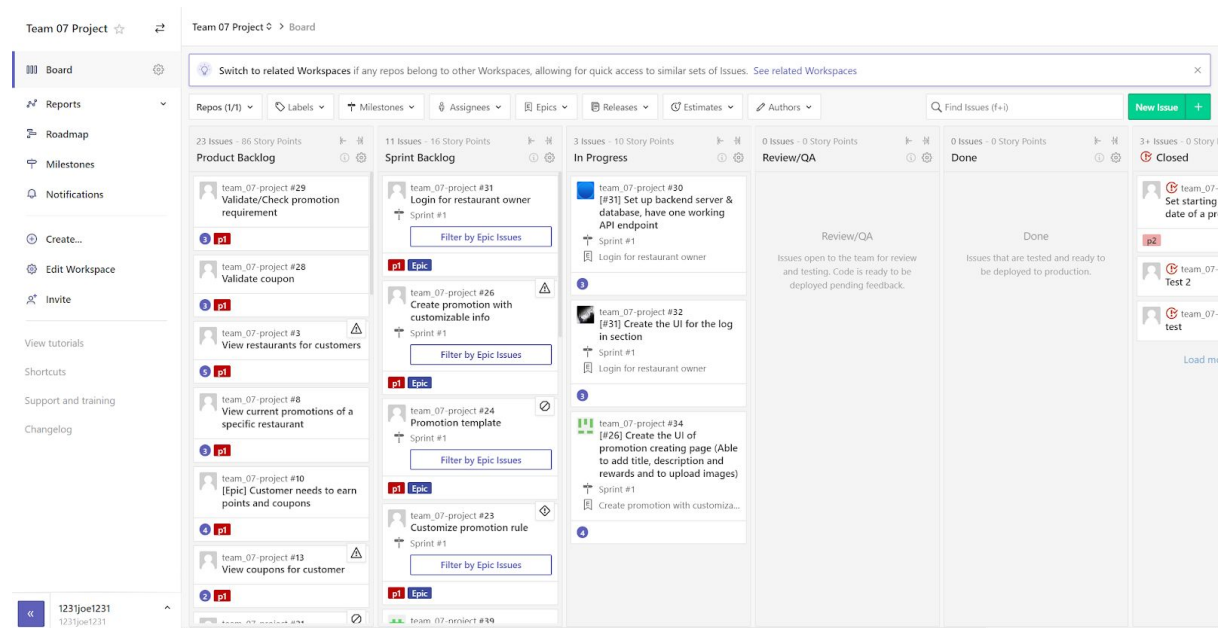
# Division of Labour

| Team members | What (#task_number) | Total Cost | When |
|---|---|---|---|
| Yiyang Zhou | #36, #40 | 5 | June 22 ~ June 28 |
| Yifei Yin | #30, #37 | 5 | June 22 ~ June 28 |
| Ruixin Zhuang | #32, #33 | 5 | June 22 ~ June 28 |
| Xinyi Chen | #34, #35 | 6 | June 22 ~ June 28 |
| Min Qi Zhang | #38, #39 | 5 | June 22 ~ June 28 |

# Snapshots

Please check out this invitation link to see our board.
**https://app.zenhub.com/workspaces/team-07-project-5eee6d65ba3415001991daf1/board**

Initial Setup of the Task Board

# Initial Setup of the Burn-down Chart

**Burndown report**

☐ Weekends     — Ideal     — Completed     ⬆ Export to CSV   ⊙

Today

| | |
|---|---|
| 26 | |
| 24 | |
| 22 | |
| 20 | |
| 18 | |
| 16 | |
| 14 | |
| 12 | |
| 10 | |
| 8 | |
| 6 | |
| 4 | |
| 2 | |
| 0 | |

Mon 22   12 PM   Tue 23   12 PM   Wed 24   12 PM   Thu 25   12 PM   Fri 26   12 PM   Sat 27   12 PM   Jun 28

**26 Total Story Points**
0 Completed / 26 Remaining

**14 Total Issues and Pull Requests**
0 Completed / 14 Remaining