

Lab: Assemble Your Product Backlog Using GitHub

Estimated time needed: 20 minutes

In this lab, you will create seven user stories based on the requirements given. The first four will be given to you. You only have to cut and paste them to get familiar with creating user stories in GitHub. You will have to create the last three user stories yourself. You will then prioritize these stories and move them into appropriate columns on your Kanban board.

Objectives

After completing this lab, you will be able to:

1. Create new user stories using GitHub issues.
2. Prioritize the product backlog.

Exercise 1: Create new user stories using GitHub issues

In this exercise, you will create the following user stories using GitHub issues:

Stories from the lesson:

Title: Need a service that has a counter

- As a user, I need a service that has a counter so that I can keep track of how many times something has been done.

Title: Must allow multiple counters

- As a user, I need to have multiple counters so that I can keep track of several counts at once.

Title: Must persist counter across restarts

- As a service provider, I need the service to persist the last known count so that users don't lose track of their counts after the service is restarted.

Title: Counters can be reset

- As a system administrator, I need the ability to reset the counter so that I can redo counting from the start.

New requirements:

- Deploy service to the cloud
- Need the ability to remove a counter
- Need the ability to update a counter to a new value

Prerequisite:

Please ensure that you have created the Issue template. If the template hasn't been created yet, kindly complete this lab [Hands-on-lab: Create an issue template in GitHub](#).

1. Go to the Issues tab of `lab-agile-planning` repository.

The screenshot shows a GitHub repository page for 'lab-agile-planning'. At the top, there's a navigation bar with links for Code, Issues (which has a red box around it), Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Below the navigation bar, the repository name 'lab-agile-planning' is displayed along with its status as 'Public'. To the right of the repository name are buttons for Pin, Unwatch (with a count of 1), and Fork. Underneath the repository name, there are buttons for main (with a dropdown arrow), 1 Branch, 0 Tags, Go to file (with a dropdown arrow), Add file (with a dropdown arrow), and Code (which is highlighted in green). On the far right, there are sections for About, README, Activity, Stars (0), Watches (1), Forks (0), Releases (no releases), and Packages (no packages). The main content area shows a commit history with three entries:

- RajshriSkillup Update issue templates · 1 minute ago · 2 Commits
- .github/ISSUE_TEMPLATE · Update issue templates · 1 minute ago
- README.md · Initial commit · 10 months ago

Below the commit history, there's a section for the README file, which contains the text "lab-agile-planning".

2. Click on the New issue button.

The screenshot shows a GitHub repository page for 'RajshriSkillup / lab-agile-planning'. The 'Issues' tab is selected. A search bar at the top contains the query 'is:issue is:open'. To the right of the search bar are buttons for 'Labels' (9) and a refresh icon. The main content area displays a message: 'Welcome to issues! Issues are used to track todos, bugs, feature requests, and more. As issues are created, they'll appear here in a searchable and filterable list. To get started, you should [create an issue](#).'. There is also a 'ProTip!' section with the text: 'Notify someone on an issue with a mention, like: @RajshriSkillup.'

3. You'll see your template listed here. Click on the User Story arrow.



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The screenshot shows a GitHub interface with the following elements:

- Header:** A navigation bar with links for Code, Issues (which is highlighted), Pull requests, Actions, Projects (3), Wiki, Security, Insights, and Settings.
- Search Bar:** A search bar containing the query "is:issue state:open".
- Statistics:** Buttons for Open (0) and Closed (0) issues.
- Filters:** Dropdown menus for Author, Labels, Projects, and Milestones.
- Create New Issue Modal:** A modal window titled "Create new issue" with three options:
 - User Story:** This option is highlighted with a red border. Description: "This is a template for creating user stories".
 - Blank issue:** Description: "Create a new issue from scratch".
 - [Edit templates](#)

4. Enter the title for the first story as **Need a service that has a counter** and update the user story section (i.e., As a, I need, So that) for now. Once done, click **Create** button.

The screenshot shows a web-based application interface for creating a new issue. At the top, there is a navigation bar with links: Code, Issues (which is highlighted), Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Below the navigation bar, the title "Create new issue" is displayed, followed by "User Story · Choose a different template". A red box highlights the "Add a title *" field, which contains the text "Need a service that has a counter". Another red box highlights the "Add a description" section, which contains the following Gherkin-like user story text:

```
**As a** User,  
**I need** a service that has a counter,  
**So that** I can keep track of how many times something was done
```

Below the user story, there are sections for "Details and Assumptions" and "Acceptance Criteria". The "Acceptance Criteria" section includes a "gherkin" heading and a template with "Given", "When", and "Then" clauses, followed by an ellipsis. At the bottom of the form, there is a file upload area with the placeholder "Paste, drop, or click to add files" and a row of buttons: "Create more" (unchecked), "Cancel", and a green "Create" button.

5. Your first user story is now created and should resemble the screenshot shown below.

The screenshot shows a GitHub repository named 'RajshriSkillup / lab-agile-planning'. The 'Issues' tab is selected, showing one open issue. The issue title is 'Need a service that has a counter #1'. A green button indicates it is 'Open'. Below the title, it says 'RajshriSkillup opened this issue now · 0 comments'. The issue body contains a user story: 'As a User, I need a service that has a counter, So that I can keep track of how many times something was done.' There are sections for 'Details and Assumptions' (with a bullet point: '[document what you know]') and 'Acceptance Criteria' (with three steps: 'Given [some context]', 'When [certain action is taken]', 'Then [the outcome of action is observed]'). On the right side, there are sidebar sections for 'Assignees' (No one assigned), 'Labels' (None yet), 'Projects' (None yet), 'Milestone' (No milestone), 'Development' (Create a branch), and 'Notifications'. At the bottom, a note says '6. To add the created user story to the Kanban board, click the settings button next to the Projects option, and then choose the Lab Agile Planning project from the dropdown that you created in the [Hands-on Lab: Get Set Up in GitHub](#).'

RajshriSkillup / lab-agile-planning

Code Issues 1 Pull requests Actions Projects 1 Wiki Security Insights Settings

Need a service that has a counter #1

Open RajshriSkillup opened this issue 17 hours ago · 0 comments

RajshriSkillup commented 17 hours ago

Owner ...

As a User,
I need a service that has a counter,
So that I can keep track of how many times something was done.

Details and Assumptions

- [document what you know]

Acceptance Criteria

Given [some context]
When [certain action is taken]
Then [the outcome of action is observed]

...

Assignees
No one—assign

Labels
None yet

Projects

Projects

Filter proj

Recent

Lab
RajshriS...

Notifications

7. Next, select the Status dropdown menu and choose New Issues. This action will move the created user story to the 'New Issues' column on the Kanban board.

Need a service that has a counter #1

[Open](#)

RajshriSkillup opened this issue 17 hours ago · 0 comments



RajshriSkillup commented 17 hours ago

Owner [...](#)

As a User,
I need a service that has a counter,
So that I can keep track of how many times something was done.

Details and Assumptions

- [document what you know]

Acceptance Criteria

Given [some context]
When [certain action is taken]
Then [the outcome of action is observed]

RajshriSkillup added this to **Lab Agile Planning** 2 minutes ago[New issues](#)[Icebox](#)[Product Backlog](#)[Sprint Backlogs](#)[In Progress](#)[Done](#)**Assignees**No one — [assign](#)**Labels**

None yet

Projects [Lab Agile](#)

Status: No sta

8. To view the newly created user story on the Kanban board, navigate to the Projects tab and select the project titled **Lab Agile Planning**.

The screenshot shows a GitHub repository page for 'RajshriSkillup / lab-agile-planning'. The top navigation bar includes links for Code, Issues (1), Pull requests, Actions, Projects (1), Wiki, Security, Insights, and Settings. A search bar at the top right contains the placeholder 'Type / to search'. Below the navigation, a search input field has the query 'is:open' entered. Under the search results, it shows '1 Open' and '0 Closed' issues. A red box highlights the 'Projects' tab and the project card for 'Lab Agile Planning', which is listed as 'Private'. The project card also shows the last update was '1 minute ago'. At the bottom of the page, there is a GitHub logo followed by copyright information: '© 2024 GitHub, Inc.' and links to Terms, Privacy, Security, Status, Docs, Contact, Manage cookies, and a link to 'Do not share my personal information'.

9. You'll notice that the newly created user story is now listed under the **New issues** column.

The screenshot shows a web-based agile planning interface. At the top, there's a header with a profile icon, the user name "RajshriSkillup / Projects / Lab Agile Planning", and a search bar. Below the header is a navigation bar with links: Backlog (selected), Priority board, Team items, Roadmap, In review, My items, and New view. There's also a "Filter by keyword or by field" button.

The main area displays a backlog board with four columns:

- New issues**: Shows 1 / 5 items, Estimate: 0. One item is listed: "lab-agile-planning #1" with the description "Need a service that has a counter".
- Icebox**: Shows 0 items, Estimate: 0.
- Product Backlog**: Shows 0 / 3 items, Estimate: 0.
- Sprint Planning**: Shows 0 items.

At the bottom of each column, there's a "+ Add item" button.

10. Since we have to create a total of seven user stories, let's adjust the default limit to 7. To achieve this, click the three dots from the New Issues column, then select the Set limit option.

The screenshot shows a project management interface titled "Lab Agile Planning". At the top, there are navigation links: Backlog (selected), Priority board, Team items, Roadmap, In review, My items, and New view. A search bar is also present. Below the navigation, there is a filter bar with the placeholder "Filter by keyword or by field".

The main area displays four columns: "New issues", "Icebox", "Product Backlog", and "Sprint Backlogs". Each column has a summary (e.g., 1/5 items, Estimate: 0) and an "Add item" button.

A context menu is open over the "New issues" column, triggered by a three-dot button. The menu is divided into two sections: "Items" and "Column". The "Column" section contains the following options:

- Set limit (highlighted with a red box)
- Edit details
- Hide from view
- Delete

11. Enter the limit as 7 in the **Column limit** text field and click Save.

The screenshot shows a Jira backlog board titled "Lab Agile Planning". The board has four columns: "New issues", "Icebox", "Product Backlog", and "Sprint Backlogs". The "Product Backlog" column is currently selected, indicated by a yellow dot icon. A modal window titled "Edit column limit" is open over this column. The modal contains a text input field with the value "7" and a "Save" button, both of which are highlighted with red boxes. Below the input field, there is a descriptive text: "A limit on the number of items in a column". The other columns show 1/5 items in "New issues", 0 items in "Icebox", and 0/3 items in "Sprint Backlogs". Each column has a "Add item" button at the bottom.

Please note that, similar to this, you can choose to modify the limits of other columns or keep the default limits.

12. To return to the 'Issues' tab for creating new user stories, simply click on the browser's back button.

The screenshot shows a browser window with the URL github.com/users/RajshriSkillup/projects/4/views/1. The page title is "Backlog · Lab Agile Planning". The browser's address bar has a red box around the left arrow icon, and a red arrow points from the text above to this icon.

Lab Agile Planning

Backlog | Priority board | Team items | Roadmap | In review | My items | + New view

Filter by keyword or by field

New issues	Icebox	Product Backlog	Sprint Backlogs
1 / 7 lab-agile-planning #1 Need a service that has a counter	0 + Add item	0 / 3 + Add item	0 / 5 + Add item

13. Continue adding stories until all seven are created and your Kanban board resembles the screenshot shown below. The first four stories are provided in the lesson. You will need to create your own role, function, and benefit for the last three stories.

🔒 Lab Agile Planning

[Backlog](#)[Priority board](#)[Team items](#)[Roadmap](#)[In review](#)[...](#)[Filter by keyword or by field](#)

New issues

7 / 7

Estimate: 0

...

● lab-agile-planning #1

Need a service that has a counter

● lab-agile-planning #2

Must allow multiple counters

● lab-agile-planning #3

Must persist counter across restarts

● lab-agile-planning #4

Counters can be reset

Icebox

0

Estimate: 0

...

lab-agile-planning #5
Deploy service to the cloud

lab-agile-planning #6
Need the ability to remove a counter

lab-agile-planning #7
Need the ability to update a counter to a new value

+ Add item + Add item

Exercise 2: Prioritize the product backlog

In this exercise, you will move issues between columns to recreate the Kanban board from the video lesson **Building the Product Backlog**. This will simulate an initial starting point for our next lab on backlog refinement. Please note that you can move the issues between columns by simply dragging and dropping them from one column to the other.

1. Move the **Need a service that has a counter** story to the top of the **Product Backlog** column.
2. Move the **Must allow multiple counters** story to the **Icebox** column.
3. Move the **Must persist counter across restarts** story to the bottom of the **Product Backlog** column.
4. Move the **Counters can be reset** story to the bottom of the **Product Backlog** column.
5. Leave the remaining stories in the **New Issues** column for now. We will move them in a later lab.

At the completion of this exercise, your Kanban board should look like the one shown below:

🔒 Lab Agile Planning

[Backlog](#)[Priority board](#)[Team items](#)[Roadmap](#)[In review](#)[N](#) Filter by keyword or by field

New issues

3 / 7

Estimate: 0

...

● lab-agile-planning #5

Deploy service to the cloud

● lab-agile-planning #6

Need the ability to remove a counter

● lab-agile-planning #7

Need the ability to update a counter to a new value

[+ Add item](#)

Icebox

1

Estimate: 0

● lab-agile-planning #2

Must allow multiple counters

[+ Add item](#)

Summary

You learned how to create new stories in GitHub using Issues in GitHub and a User Story template. You also learned how to quickly prioritize your product backlog. You now have enough stories in your repository to start planning with GitHub.

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