



وزارة الاتصالات
وتقنية المعلومات
MINISTRY OF COMMUNICATIONS
AND INFORMATION TECHNOLOGY



الأكاديمية السعودية الرقمية
SAUDI DIGITAL ACADEMY

Agile Scrum Master Course

Project title: Smart Weather (With Jira)

Submitted By:

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Date: 5, Sep.

1. DESCRIPTION:

The purpose of the project is to apply the concepts learned in the Agile Scrum Master course by analyzing a hypothetical organization.

Participants are encouraged to apply the techniques learned during the program but can also be creative in applying other techniques from other sources.

The steps may not always be carried out in the same sequence in real life. Participants may iterate through steps, as they may uncover ideas as they proceed from one step to the next.

2. Project Description:

GTM systems is a large IT company with offices all around the world. The company delivers software products and services to corporate clients. One of the reasons for its enduring success and consistent performance over the years is the ability to leverage technology and find innovative applications for it.

3. Smart Weather:

With climate change increasing the unpredictability of local weather conditions, there has been great demand for technology that can provide reliable weather information. Weather conditions impact several organizations and businesses – ranging from agriculture, outdoor event management, hospitality, travel and tourism, and healthcare.

While GTM has no expertise in meteorology, it proposes to aggregate weather data from multiple providers and use analytics to correlate it with meaningful conclusions for businesses.

Example use cases could be generating forecasts based on local weather conditions around:

1. Consumption of hot versus cold beverages depending on cold, sunny, or rainy weather
2. Number of visitors to a tourist site or an open-air entertainment event
3. Likelihood of seasonal illnesses such as flu in particular locations

The main system will comprise a web portal and a set of “apps” available on the popular mobile operating systems. Apart from this, clients can ask for specific services or apps based on the insights that the analytics can generate.

4. Backlog for the main portal:

Work items

Enable registration for free and paid users
Build integrations with public weather services around the world
Detect locations based on GPS (if on a device) or IP
Create a schema and a database for storing weather data based on location
Build logic to reconcile and aggregate data from multiple service providers
Access control for paid services
Provide severe weather advisory to registered users on the portal
Have provisions for advertisements on the portal and apps
Show current weather at a location
Show forecasts for five, ten, and fifteen days at a location
Provide seasonal forecasts like seasonal precipitation and temperatures
Show satellite images
Show time-lapse videos of satellite forecasts
Make a responsive design for the portal (usable for different devices and form factors)
Publish API or Services for client apps
Create apps for iOS and Android phones

5. Project task

Based on the above scenario, you are expected to perform the following tasks.

1. Identify at least five epics and 15 user stories from the case above (use your interpretation and independent research). Link the stories to the epics.
2. Get a free JIRA account and create a Scrum project.
3. Enter the backlog (epics, stories and subtasks) in JIRA.
4. Make a tentative release plan, by assigning the stories to three sprints.
5. Start and complete one sprint.
6. Submit screenshots of: Epics, Backlog, release plan, and Scrum board with tasks in various states.

Jira Software is an agile project management tool that supports any agile methodology. From agile boards, backlogs, roadmaps, reports, to integrations and add-ons you can plan, track, and manage all your agile software development projects from a single tool.

(Screenshots of Jira Software):

Identify at least five epics and 15 user stories from the case above. Link the stories to the epics.

Five Epics:

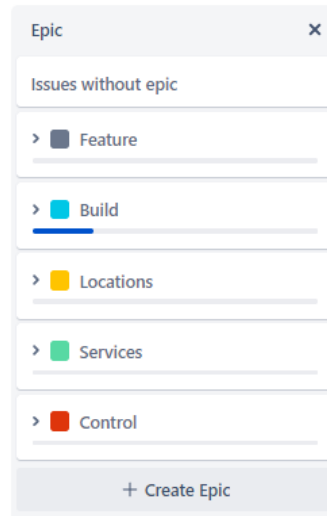


Figure 0: All Five Epics.

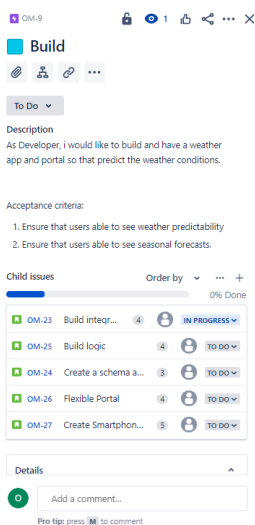


Figure 1: Details of Build epic.

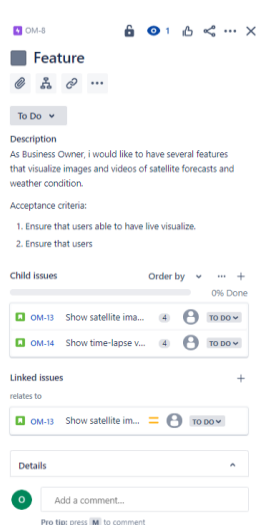


Figure 2: Details of Feature epic.

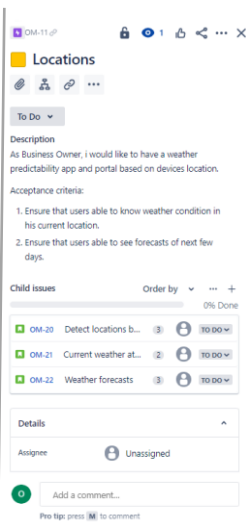


Figure 3: Details of Location epic.

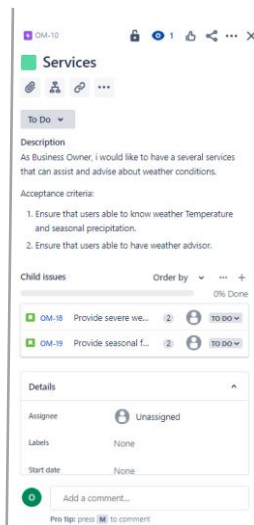


Figure 4: Details of Service epic.

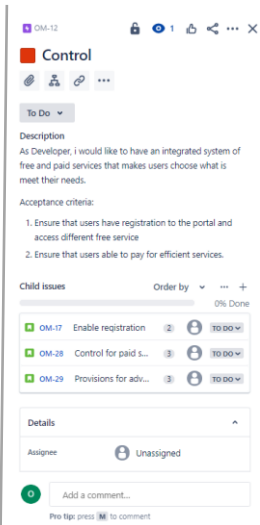


Figure 5: Details of Control epic.

15 user stories:

The screenshot shows the Jira Software interface for a project named 'OmarAljabri'. The 'Backlog' tab is selected, displaying a list of 15 user stories. Each story is represented by a card with a title, a status (e.g., BUILD, LOCATIONS, CONTROL, FEATURE, SERVICES), and a priority (e.g., 4, 3, 2, 1). The stories are ordered by priority, with the highest priority at the top. The interface includes a sidebar with navigation options like Roadmap, Backlog, Board, Releases, Project pages, Add shortcut, and Project settings. A search bar and a 'Create' button are visible at the top right.

Story ID	Title	Type	Priority	Status
OM-23	Build integrations	BUILD	4	IN PROGRESS
OM-25	Build logic	BUILD	4	TO DO
OM-24	Create a schema and a database	BUILD	3	TO DO
OM-20	Detect locations based on GPS	LOCATIONS	3	TO DO
OM-17	Enable registration	CONTROL	2	TO DO
OM-13	Show satellite images	FEATURE	4	TO DO
OM-14	Show time-lapse videos of satellite forecasts	FEATURE	4	TO DO
OM-26	Flexible Portal	BUILD	4	TO DO
OM-27	Create Smartphone App	BUILD	5	TO DO
OM-21	Current weather at a location	LOCATIONS	2	TO DO
OM-22	Weather forecasts	LOCATIONS	3	TO DO
OM-18	Provide severe weather advisory	SERVICES	2	TO DO
OM-19	Provide seasonal forecasts	SERVICES	2	TO DO
OM-28	Control for paid services	CONTROL	3	TO DO
OM-29	Provisions for advertisements	CONTROL	3	TO DO

Figure 6: All 15 Stories

This screenshot shows the details of the 'Build integrations' user story (OM-23). The story is assigned to 'OmarAljabri' and is in the 'Done' state. The description states: 'As Developer, I would like to build integration system with public weather services around the world.' The acceptance criteria are: '1. Ensure that users able to have weather services around the world.' The details section shows the assignee as 'Unassigned', labels as 'None', sprint as 'OM Sprint 1', story point estimate as '4', fix versions as 'Release 1', and the reporter as 'OmarAljabri'.

Figure 7: Build Integration story.

This screenshot shows the details of the 'Build logic' user story (OM-25). The story is assigned to 'OmarAljabri' and is in the 'Done' state. The description states: 'As Developer, I would like to build logic to reconcile and aggregate data from multiple service providers.' The acceptance criteria are: '1. Ensure that users have right information and up to date.' The details section shows the assignee as 'Unassigned', labels as 'None', sprint as 'OM Sprint 1', story point estimate as '4', fix versions as 'Release 1', and the reporter as 'OmarAljabri'.

Figure 8: Build logic story.

This screenshot shows the details of the 'Create a schema and a database' user story (OM-24). The story is assigned to 'OmarAljabri' and is in the 'Done' state. The description states: 'As Developer, I would like to create a schema and a database for storing weather data based on location.' The acceptance criteria are: '1. Ensure that users able to save their data and modification they made to portal.' The details section shows the assignee as 'Unassigned', labels as 'None', sprint as 'OM Sprint 1', story point estimate as '3', fix versions as 'Release 1', and the reporter as 'OmarAljabri'.

Figure 9: Create schema and DB story.

This screenshot shows the details of the 'Detect locations based on GPS' user story (OM-20). The story is assigned to 'OmarAljabri' and is in the 'In Progress' state. The description states: 'As Developer, I would like to create location detection based on GPS, if on a device or IP address.' The acceptance criteria are: '1. Ensure that users able to know weather information for their locations.' The details section shows the assignee as 'Unassigned', labels as 'None', sprint as 'OM Sprint 1', story point estimate as '3', fix versions as 'Release 1', and the reporter as 'OmarAljabri'.

Figure 10: Detect Location Story

This screenshot shows the details of the 'Enable registration' user story (OM-17). The story is assigned to 'OmarAljabri' and is in the 'In Progress' state. The description states: 'As Developer, I would like to develop the registration for free and paid so that my users can see weather condition and more "Smart Weather" feature.' The acceptance criteria are: '1. Ensure that users able to see the weather recons based on their needs. 2. Ensure that users able to edit the needs and search again.' The details section shows the assignee as 'Unassigned', labels as 'None', sprint as 'OM Sprint 1', story point estimate as '2', fix versions as 'Release 1', and the reporter as 'OmarAljabri'.

Figure 11: Enable registration.

This screenshot shows the details of the 'Show satellite images' user story (OM-13). The story is assigned to 'OmarAljabri' and is in the 'To Do' state. The description states: 'As Developer, I would like to show satellite images.' The acceptance criteria are: '1. Ensure that users able to see satellite images.' The details section shows the assignee as 'Unassigned', labels as 'None', sprint as 'None', story point estimate as '4', fix versions as 'Release 2', and the reporter as 'OmarAljabri'.

Figure 12: Show satellite images story.

This screenshot shows the details of the 'Show time-lapse videos of satellite forecasts' user story (OM-14). The story is assigned to 'OmarAljabri' and is in the 'To Do' state. The description states: 'As Developer, I would like to show time-lapse videos of satellite forecasts.' The acceptance criteria are: '1. Ensure that users able to see time-lapse videos of satellite forecasts.' The details section shows the assignee as 'Unassigned', labels as 'None', sprint as 'None', story point estimate as '4', fix versions as 'Release 3', and the reporter as 'OmarAljabri'.

Figure 13: Show time-lapse story.

This screenshot shows the details of the 'Flexible Portal' user story (OM-26). The story is assigned to 'OmarAljabri' and is in the 'To Do' state. The description states: 'As Developer, I would like to make flexible design that enhance ease of use the portal.' The acceptance criteria are: '1. Ensure that users have responsive design 2. Ensure that users have a usable portal for different devices platforms.' The details section shows the assignee as 'Unassigned', labels as 'None', sprint as 'None', story point estimate as '4', fix versions as 'Release 2', and the reporter as 'OmarAljabri'.

Figure 14: Flexible Portal Story.

This screenshot shows the details of the 'Create Smartphone App' user story (OM-27). The story is assigned to 'OmarAljabri' and is in the 'To Do' state. The description states: 'As Developer, I would like to develop a "SmartWeather" app for iOS and Android devices.' The acceptance criteria are: '1. Ensure that smartphones users able to enter the portal through "SmartWeather" App. 2. Ensure that users able to see last weather status.' The details section shows the assignee as 'Unassigned', labels as 'None', sprint as 'None', story point estimate as '5', and the reporter as 'OmarAljabri'.

Figure 15: Create App story.

This screenshot shows the details of the 'Current weather at a location' user story (OM-21). The story is assigned to 'OmarAljabri' and is in the 'To Do' state. The description states: 'As Developer, I would like to develop our locations detection to show the current weather at a specific location.' The acceptance criteria are: '1. Ensure that show users current weather conditions based on their location.' The details section shows the assignee as 'Unassigned', labels as 'None', sprint as 'None', story point estimate as '2', fix versions as 'Release 2', and the reporter as 'OmarAljabri'.

Figure 16: Current weather story.

Locations / OM-22

Weather forecasts

To Do

Description

As Developer, i would like to develop our locations detection to show weather forecasts for five, ten and fifteen days at location.

Acceptance criteria:

1. Ensure that users able to see what is weather condition for coming days.
2. Ensure that users able to have right decisions of their camping based on the forecasts predict feature.

Details

Assignee

Labels

Sprint

Story point estimate

Fix versions

Figure 17: Weather Forecasts story.

Services / OM-18

Provide severe weather advisory

To Do

Description

As Developer, i would like to develop advisor that guide and assist for those who registered on the portal.

Acceptance criteria:

1. Ensure that users has advisor who predict to them the severe weather.

Details

Assignee

Labels

Sprint

Story point estimate

Fix versions

Reporter

Figure 18: Provide weather advisory

Services / OM-19

Provide seasonal forecasts

To Do

Description

As Developer, i would like to develop seasonal forecasts like seasonal precipitation and temperatures.

Acceptance criteria:

1. Ensure that users have a perception of the weather forecast

Details

Assignee

Labels

Sprint

Story point estimate

Fix versions

Reporter

Figure 19: Seasonal forecasts story.

Control / OM-28

Control for paid services

To Do

Description

As Developer, i would like to develop access control for paid services for who have paid for them.

Acceptance criteria:

1. Ensure that users has better services that meet their needs
2. Ensure that users got right away access after payment success.

Details

Assignee

Labels

Sprint

Story point estimate

Fix versions

Reporter

Figure 20: Control For paid Services story.

Control / OM-29

Provisions for advertisements

To Do

Description

As Developer, i would like to have a provisions for advertisements on the portal and apps.

Acceptance criteria:

1. Ensure that users have a acceptable ads.
2. Ensure that users aren't have annoying ads.

Details

Assignee

Labels

Sprint

Story point estimate

Fix versions

Reporter

Figure 21: Provisions story.

Release plan:

Jira Software

Your work

Projects

Filters

Dashboards

People

Apps

Create

Search

Give feedback

Create version

Releases

Version

Status

Progress

Start date

Release date

Description

Release 1

UNRELEASED

Release 2

UNRELEASED

Release 3

UNRELEASED

Figure 22: Release plans.

Jira Software

Your work

Projects

Filters

Dashboards

People

Apps

Create

Search

Give feedback

Create version

Releases

Version

Status

Progress

Start date

Release date

Description

Release 1

UNRELEASED

Release 2

UNRELEASED

Release 3

UNRELEASED

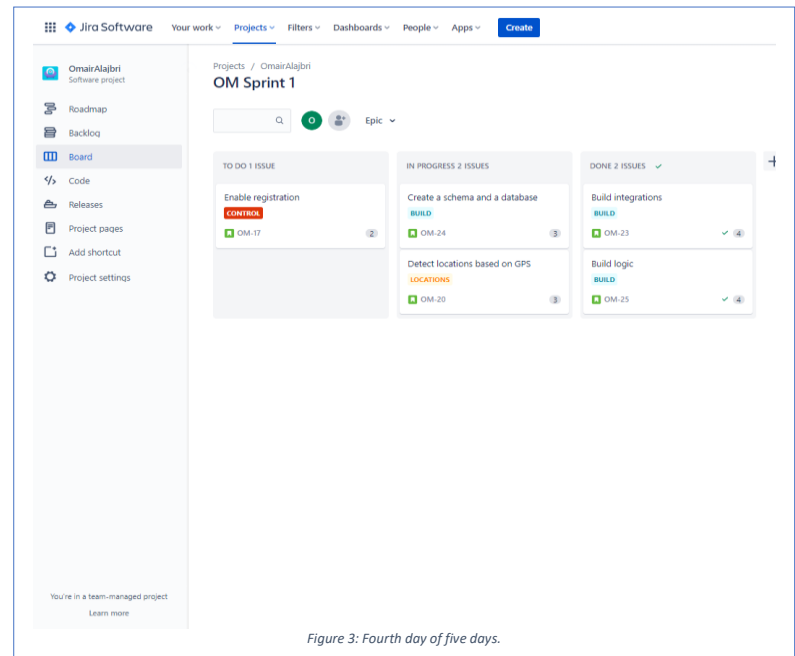
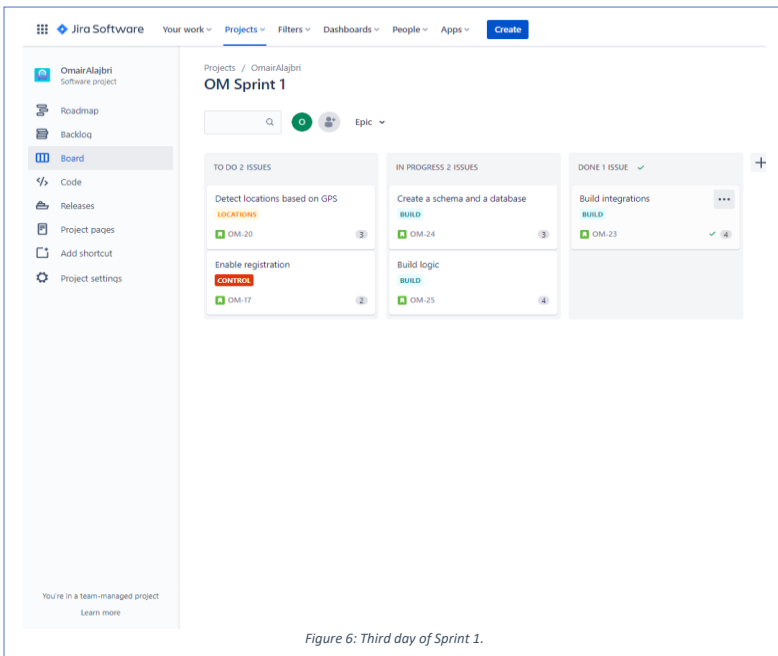
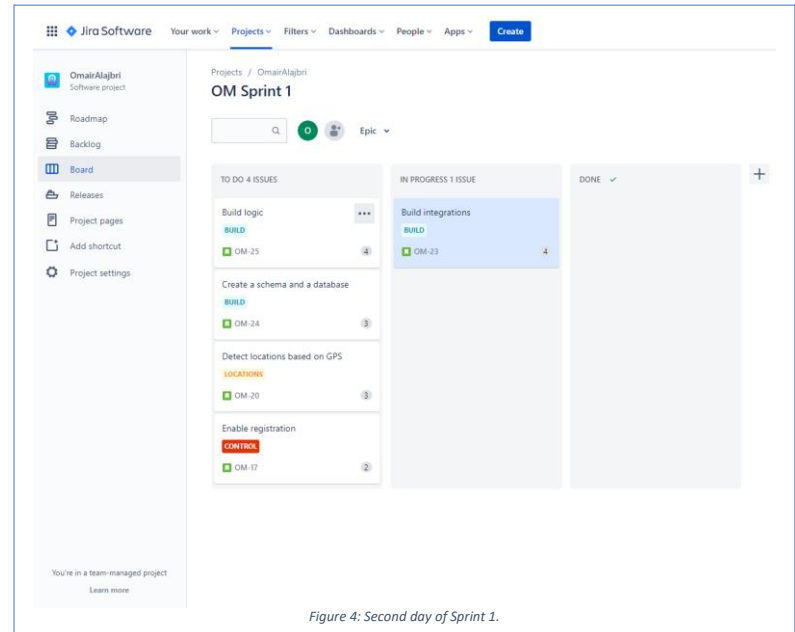
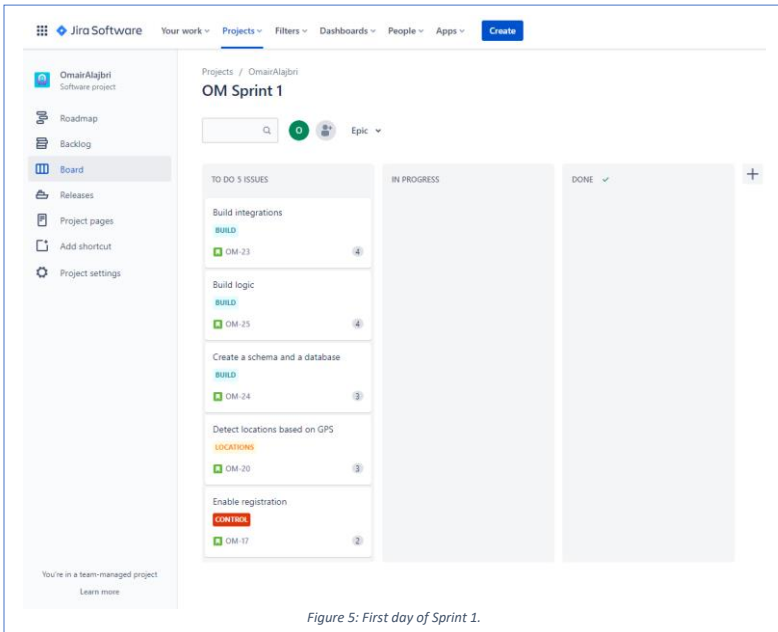
Release

You're in a team-managed project

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Figure 23: After Complete one Release plan.

Complete one sprint:



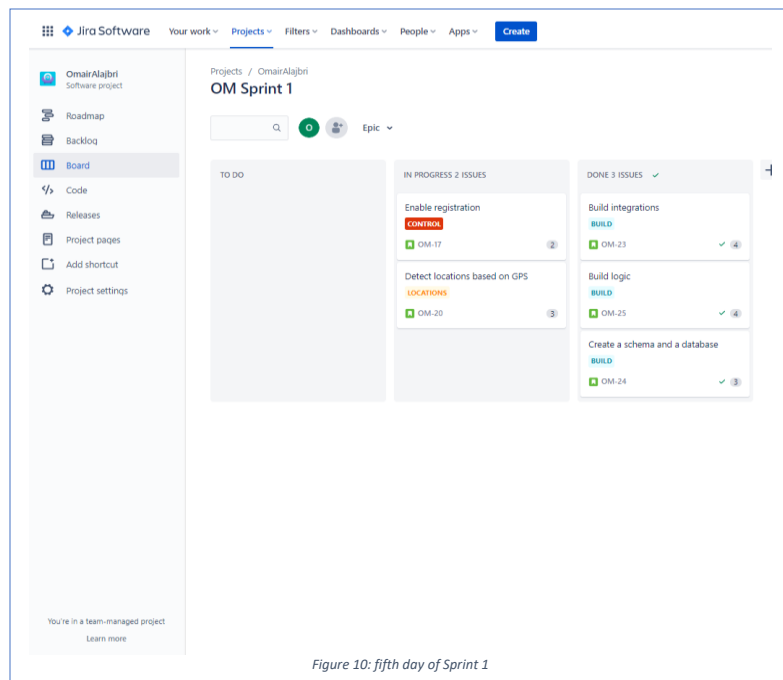


Figure 10: fifth day of Sprint 1

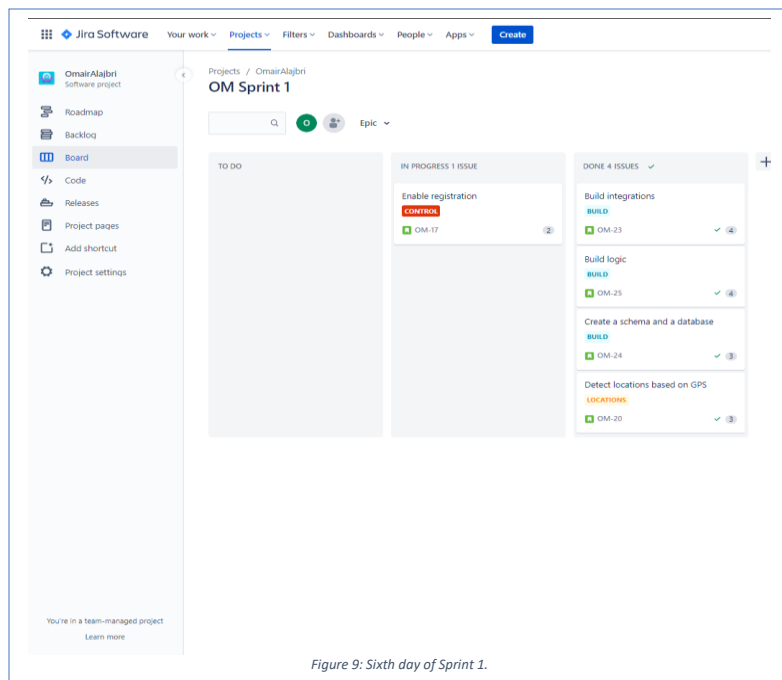


Figure 9: Sixth day of Sprint 1.

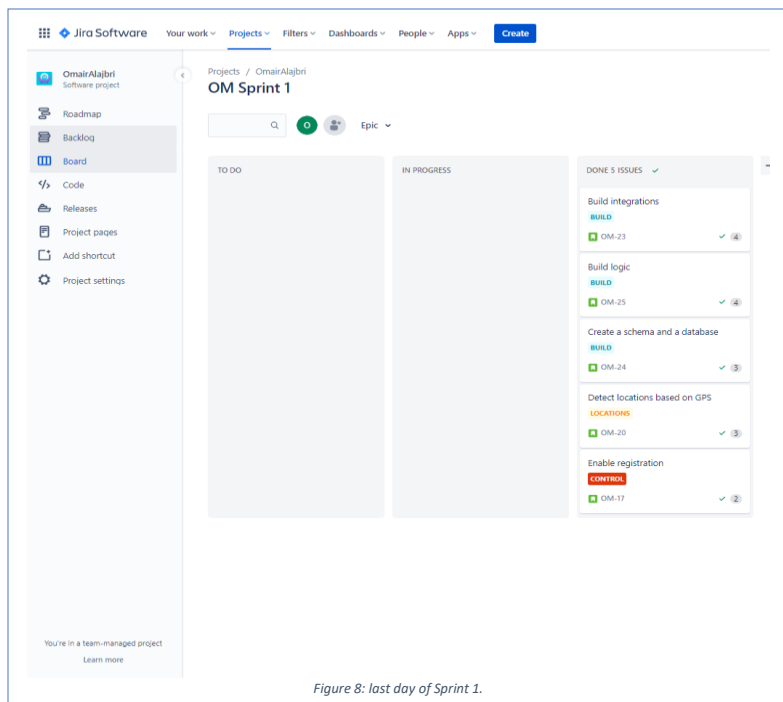


Figure 8: last day of Sprint 1.

