



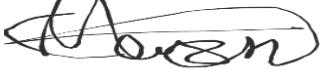
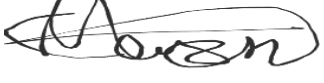


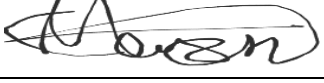
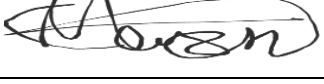



Student Name	Mosete Cardicia Masemola
Student Number	ST10179192
Module Code	APPR6312
Assessment Type	POE(PART 1)

### ASSESSMENT DECLARATION

	SIGN
I have read the assessment rules provided in this declaration.	
This assessment is my own work.	
I have not copied any other student's work in this assessment.	
I have not uploaded the assessment question to any website or App offering assessment assistance.	
I have not downloaded my assessment response from a website.	
I have not used any AI tool without reviewing, re-writing, and re-working this information, and referencing any AI tools in my work.	
I have not shared this assessment with any other student.	
I have not presented the work of published sources as my own work.	
I have correctly cited all my sources of information.	
My referencing is technically correct, consistent, and congruent.	
I have acted in an academically honest way in this assessment.	

**POE PART 1**

## QUESTION 1

LINK FOR DevOps :

<https://dev.azure.com/ST10179192/Gift%20of%20the%20givers%20foundation>

### 1.1. TEAMS :

The screenshot shows the 'Teams' page in Azure DevOps. The left sidebar contains 'Project Settings' for 'Gift of the givers foundation' with options: General, Overview, Teams (selected), Permissions, Notifications, Service hooks, Dashboards, and Boards. The main area shows a table of teams:

Name	Description	Members
Alternative team		2
Gift of the givers foundation Team	The default project team.	2

Buttons for 'Filter teams' and 'New Team' are visible.

### ITERATIONS :

The screenshot shows the 'Iterations' page in Azure DevOps. The left sidebar is the same as the previous screenshot, but 'Project configuration' is selected under 'Boards'. The main area shows a table of iterations:

Iterations	Start Date	End Date
Gift of the givers foundation		
Requirements and Design	8/26/2024	9/1/2024
User registration and login	9/2/2024	9/8/2024
Disaster incident report frame	9/9/2024	9/15/2024
Donation and volunteer frame	9/16/2024	9/22/2024
Testing and bug fixing	9/23/2024	9/29/2024
Feedback	9/30/2024	10/6/2024

### AREA :

The screenshot shows the 'Areas' page in Azure DevOps. The left sidebar is the same as the previous screenshots, but 'Project configuration' is selected under 'Boards'. The main area shows a table of areas:

Areas	Teams
Gift of the givers foundation	
Alternative team	Alternative team, Gift of the givers foundation Team
Deployment	Gift of the givers foundation Team
Design	Gift of the givers foundation Team
Development	Gift of the givers foundation Team
Documentation	Gift of the givers foundation Team
Project management	Gift of the givers foundation Team
Requirements analysis	Gift of the givers foundation Team
Testing	Gift of the givers foundation Team
User feedback and refinements	Gift of the givers foundation Team

1.2.

## USER STORY : Project Manager user story

The screenshot displays the Azure DevOps interface for a user story titled "Project manager" (USER STORY 11). The left sidebar shows the project structure with "Work items" selected. The main content area shows the user story details, including the state (Active), area (Gift of the givers foundation\Alternative team), and reason (Reintroduced in Scope). The description field contains the text "Ensures all requirements are stated and met on time." The planning section shows story points (2), priority (2), and risk (2 - Medium). The deployment section includes a link to track releases. The development section has an "Add link" button and a link to an Azure Repos commit, pull request, or branch. The discussion section has a comment box with a "switch to Markdown editor" link.

## User Story : User

The screenshot displays the Azure DevOps interface for a user story titled "User" (USER STORY 15). The left sidebar shows the project structure with "Work items" selected. The main content area shows the user story details, including the state (Active), area (Gift of the givers foundation\Alternative team), and reason (Implementation started). The description field contains the text "Click to add Acceptance Criteria." The planning section shows story points (3), priority (3), and risk (2 - Medium). The deployment section includes a link to track releases. The development section has an "Add link" button and a link to an Azure Repos commit, pull request, or branch. The discussion section has a comment box with a "switch to Markdown editor" link. The related work section shows a list of related work items, including "14 Develop user registration and login" and "16 Implement registration form".

## User Story : User two

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Work Items

Search

Gift of the givers foun... +

Overview

Boards

Work Items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Recently updated

Back to Work Items

4 of 24

USER STORY 19

User two

Sydney Sediela

0 Comments Add Tag

Save Follow

Updated by Mosete Masemola Just now

Details

Stat: New

Reason: Moved to the backlog

Area: Gift of the givers foundation/Alternative team

Iteration: Gift of the givers foundation/Disaster incident report frame

Description

Acceptance Criteria

Click to add Acceptance Criteria.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

Link to Markdown editor

Planning

Story Points

Priority: 2

Risk: 2 - Medium

Classification

Value area: Business

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link

Parent

19 Develop disaster incident report frame Updated Yesterday New

Child

20 Implement report form Updated Yesterday New

21 Store incident reports in database Updated Yesterday New

## User Story : User3

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Work Items

Search

Gift of the givers foun... +

Overview

Boards

Work Items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Recently updated

Back to Work Items

3 of 24

USER STORY 23

User 3

Mosete Masemola

0 Comments Add Tag

Save Follow

Updated by Mosete Masemola Just now

Details

Stat: New

Reason: New

Area: Gift of the givers foundation/Alternative team

Iteration: Gift of the givers foundation/Donation and volunteer frame

Description

Acceptance Criteria

Click to add Acceptance Criteria.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

Link to Markdown editor

Planning

Story Points

Priority: 1

Risk: 2 - Medium

Classification

Value area: Business

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link

Parent

22 Develop donation and volunteer frame Updated Yesterday New

Child

24 Create donation and volunteer form Updated Yesterday New

25 Store the volunteers details in the database Updated Yesterday New

## User Story : QA tester

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Work Items

Search

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Recently updated

Back to Work Items

11 of 24

USER STORY 27

27 QA tester

Sydney Sediela

0 Comments Add Tag

Save Follow

Updated by Mosete Masemola just now

Details

State: New

Reason: New

Area: Gift of the givers foundation/Alternative team

Iteration: Gift of the givers foundation/Testing and bug fixing

Description

Acceptance Criteria

Click to add Acceptance Criteria.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Story Points

Priority: 2

Risk: 2 - Medium

Classification

Value area: Business

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link

Parent

35 Testing and bug fixing Updated Yesterday @ New

Child

29 Log and fix bugs Updated Yesterday @ New

20 Perform unit testing Updated Yesterday @ New

## User Story : Stakeholder

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Work items

Search

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Recently updated

Back to Work Items

6 of 6

USER STORY 31

31 Stakeholder

Mosete Masemola

0 Comments Add Tag

Save Follow

Updated by Mosete Masemola: 3h ago

Details

State: New

Reason: New

Area: Gift of the givers foundation/Alternative team

Iteration: Gift of the givers foundation/Feedback

Description

Acceptance Criteria

Click to add Acceptance Criteria.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Story Points

Priority: 2

Risk: 2 - Medium

Classification

Value area: Business

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

- Epics

## Epic 1:

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Work Items

Gift of the givers foun... +

Overview

Boards

Work Items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Recently updated

Back to Work Items

24 of 24

EPIC 10

10 Gather and analyze requirements

Sydney Sediela

0 Comments

Add Tag

Save

Follow

Updated by Mosete Masemola Just now

Details

Description

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or / to link a pull request.

Link to Markdown editor

Planning

Priority 3

Risk 2 - Medium

Effort

Business Value

Time Criticality

Start Date 8/26/2024 12:00 AM

Target Date 9/1/2024 12:00 AM

Classification

Value area Business

Deployment

To track releases associated with this work item, go to Releases and turn on deployment status reporting for Boards in your pipeline's Options menu. Learn more about deployment status reporting

Development

Add link

Link an Azure Repos commit, pull request or branch to see the status of your development. You can also create a branch to get started.

Related Work

Add link

Add an existing work item as a parent

Child

11 Project manager

Updated 6m ago

Active

## Epic 2 :

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Work Items

Gift of the givers foun... +

Overview

Boards

Work Items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Recently updated

Back to Work Items

22 of 24

EPIC 14

14 Develop user registration and login

Mosete Masemola

0 Comments

Add Tag

Save

Follow

Updated by Mosete Masemola Just now

Details

Description

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or / to link a pull request.

Link to Markdown editor

Planning

Priority 2

Risk 2 - Medium

Effort

Business Value

Time Criticality

Start Date 9/2/2024 12:00 AM

Target Date 9/8/2024 12:00 AM

Classification

Value area Business

Deployment

To track releases associated with this work item, go to Releases and turn on deployment status reporting for Boards in your pipeline's Options menu. Learn more about deployment status reporting

Development

Add link

Link an Azure Repos commit, pull request or branch to see the status of your development. You can also create a branch to get started.

Related Work

Add link

Add an existing work item as a parent

Child

15 User

Updated 7m ago

Active

## Epic 3 :

**Azure DevOps** ST10179192 / Gift of the givers foundation / Boards / Work items

Search

Gift of the givers four... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Recently updated

Back to Work Items

20 of 24

EPIC 18

18 Develop disaster incident report frame

Sydney Sediela

0 Comments Add Tag

Save Follow

Updated by Mosete Masemola Just now

Details

Description

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or / to link a pull request.

Link to Markdown editor

Planning

Priority 2

Risk 2 - Medium

Effort

Business Value

Time Criticality

Start Date 9/9/2024 12:00 AM

Target Date 9/15/2024 12:00 AM

Classification

Value area Business

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link

Add an existing work item as a parent

Child

9 User two

Updated 6m ago

## Epic 4 :

**Azure DevOps** ST10179192 / Gift of the givers foundation / Boards / Work items

Search

Gift of the givers four... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Recently updated

Back to Work Items

18 of 24

EPIC 22

22 Develop donation and volunteer frame

Mosete Masemola

0 Comments Add Tag

Save Follow

Updated by Mosete Masemola Yesterday

Details

Description

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or / to link a pull request.

Link to Markdown editor

Planning

Priority 2

Risk

Effort

Business Value

Time Criticality

Start Date 9/16/2024 12:00 AM

Target Date 9/22/2024 12:00 AM

Classification

Value area Business

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link

Add an existing work item as a parent

Child

23 User 3

Updated 8m ago

## Epic 5 :

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Work items

Gift of the givers foun... +

Overview  
Boards  
Work items  
Boards  
Backlogs  
Sprints  
Queries  
Delivery Plans  
Analytics views  
Repos  
Pipelines  
Test Plans  
Artifacts

Recently updated Back to Work items 15 of 24

EPIC 26  
26 Testing and bug fixing  
Sydney Sediela 0 Comments Add Tag

Save Follow Details

Updated by Mosete Masemola Just now

State: New Area: Gift of the givers foundation/Alternative team  
Reason: New Iteration: Gift of the givers foundation/Testing and bug fixing

Description

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or / to link a pull request.

Planning

Priority: 2  
Risk: 2 - Medium  
Effort:  
Business Value:  
Time Criticality:  
Start Date: 9/23/2024 12:00 AM  
Target Date: 9/29/2024 12:00 AM

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link

Add an existing work item as a parent

Child

27 QA tester  
Updated 6m ago @ New

## Epic 6:

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Work items

Gift of the givers foun... +

Overview  
Boards  
Work items  
Boards  
Backlogs  
Sprints  
Queries  
Delivery Plans  
Analytics views  
Repos  
Pipelines  
Test Plans  
Artifacts

Recently updated Back to Work items 13 of 24

EPIC 30  
30 Collect feedback  
Mosete Masemola 0 Comments Add Tag

Save Follow Details

Updated by Mosete Masemola Yesterday

State: New Area: Gift of the givers foundation/Alternative team  
Reason: New Iteration: Gift of the givers foundation/Feedback

Description

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or / to link a pull request.

Planning

Priority: 2  
Risk:  
Effort:  
Business Value:  
Time Criticality:  
Start Date: 9/30/2024 12:00 AM  
Target Date: 9/6/2024 12:00 AM

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link

Add an existing work item as a parent

Child

11 Stakeholder  
Updated 8m ago @ New

- Tasks

## Task 1 :



Gift of the givers foun... +

Recently updated Back to Work Items 11 of 12 ↑ ↓

**TASK 12**

12 Conduct meetings with stakeholders

Sydney Sediela 0 Comments Add Tag

Save Follow

Updated by Mosete Masemola: Yesterday

Details 1 0

Statg: New Area: Gift of the givers foundation\Alternative team Reason: New Iteration: Gift of the givers foundation\Requirements and Design

**Description**

Click to add Description.

**Discussion**

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

**Planning**

Priority: 2 Activity: Requirements

**Effort (Hours)**

Original Estimate: 8 Remaining: 2 Completed:

**Implementation**

Integrated in Build

**Deployment**

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

**Development**

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

## Task 2 :

Gift of the givers foun... +

Recently updated Back to Work Items 12 of 12 ↑ ↓

**TASK 13**

13 Documentation of requirements

Sydney Sediela 0 Comments Add Tag

Save Follow

Updated by Mosete Masemola: Yesterday

Details 1 0

Statg: New Area: Gift of the givers foundation\Alternative team Reason: New Iteration: Gift of the givers foundation\Requirements and Design

**Description**

Click to add Description.

**Discussion**

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

**Planning**

Priority: 2 Activity: Requirements

**Effort (Hours)**

Original Estimate: 8 Remaining: 2 Completed:

**Implementation**

**Deployment**

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

**Development**

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

## Task 3 :

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings <<

Recently updated

Back to Work Items

10 of 12 ↑ ↓

TASK 16

16 Implement registration form

Mosete Masemola 0 Comments Add Tag

Save Follow Settings Refresh Copy & Paste

Updated by Mosete Masemola: Yesterday

Details 1 0

State New

Area Gift of the givers foundation\Alternative team

Reason New

Iteration Gift of the givers foundation\User registration and login

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Priority 2

Activity Development

Effort (Hours)

Original Estimate 10

Remaining 5

Completed

Implementation

Integrated in Build

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

## Task 4 :

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings <<

Recently updated

Back to Work Items

9 of 12 ↑ ↓

TASK 17

17 Store registration details in the database

Mosete Masemola 0 Comments Add Tag

Save Follow Settings Refresh Copy & Paste

Updated by Mosete Masemola: Yesterday

Details 1 0

State New

Area Gift of the givers foundation\Alternative team

Reason New

Iteration Gift of the givers foundation\User registration and login

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Priority 2

Activity Development

Effort (Hours)

Original Estimate 10

Remaining 5

Completed

Implementation

Integrated in Build

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

## Task 5:

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings

Recently updated

Back to Work Items

8 of 12

TASK 20

20 Implement report form

Sydney Sediela

0 Comments

Add Tag

Save

Follow

Details

Updated by Mosete Masemola: Yesterday

State: New

Area: Gift of the givers foundation\Alternative team

Reason: New

Iteration: Gift of the givers foundation\Disaster incident report frame

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Priority: 2

Activity: Development

Effort (Hours)

Original Estimate: 10

Remaining: 5

Completed

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Implementation

Integrated in Build

## Task 6 :

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings

Recently updated

Back to Work Items

6 of 12

TASK 21

21 Store incident reports in database

Sydney Sediela

0 Comments

Add Tag

Save

Follow

Details

Updated by Mosete Masemola: 1h ago

State: New

Area: Gift of the givers foundation\Alternative team

Reason: New

Iteration: Gift of the givers foundation\Disaster incident report frame

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Priority: 2

Activity: Development

Effort (Hours)

Original Estimate: 8

Remaining: 4

Completed

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Implementation

Integrated in Build

## Task 7 :

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings

Recently updated

Back to Work Items

7 of 12

TASK 24

24 Create donation and volunteer form

Mosete Masemola

0 Comments

Add Tag

Save

Follow

Details

Updated by Mosete Masemola: Yesterday

State: New

Area: Gift of the givers foundation\Alternative team

Reason: New

Iteration: Gift of the givers foundation\Donation and volunteer frame

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Priority: 2

Activity: Development

Effort (Hours)

Original Estimate: 10

Remaining: 5

Completed

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Implementation

## Task 8 :

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Recently updated

Back to Work Items

8 of 12

TASK 25

25 Store the volunteers details in the database

Mosete Masemola

0 Comments

Add Tag

Save

Follow

Updated by Mosete Masemola: Yesterday

Details

1

0

State: New

Area: Gift of the givers foundation\Alternative team

Reason: New

Iteration: Gift of the givers foundation\Donation and volunteer frame

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Priority: 2

Activity

Effort (Hours)

Original Estimate: 10

Remaining: 5

Completed

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Implementation

## Task 9 :

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Recently updated

Back to Work Items

9 of 12

TASK 28

28 Perform unit testing

Sydney Sediela

0 Comments

Add Tag

Save

Follow

Updated by Mosete Masemola: Yesterday

Details

1

0

State: New

Area: Gift of the givers foundation\Alternative team

Reason: New

Iteration: Gift of the givers foundation\Testing and bug fixing

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Priority: 2

Activity: Testing

Effort (Hours)

Original Estimate: 6

Remaining: 3

Completed

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Implementation

## Task 10 :

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings

Recently updated

Back to Work Items

10 of 12

TASK 29

Log and fix bugs

Sydney Sediela

0 Comments

Add Tag

Save

Follow

Details

1

0

State: New

Reason: New

Area: Gift of the givers foundation\Alternative team

Iteration: Gift of the givers foundation\Testing and bug fixing

Updated by Mosete Masemola: Yesterday

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Priority: 2

Activity: Testing

Effort (Hours)

Original Estimate

Remaining

Completed

Implementation

Integrated in Build

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

## Task 11 :

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings

Recently updated

Back to Work Items

11 of 12

TASK 32

Gather feedback

Mosete Masemola

0 Comments

Add Tag

Save

Follow

Details

1

0

State: New

Reason: New

Area: Gift of the givers foundation\Alternative team

Iteration: Gift of the givers foundation\Feedback

Updated by Mosete Masemola: Yesterday

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Priority: 2

Activity: Documentation

Effort (Hours)

Original Estimate: 6

Remaining: 3

Completed

Implementation

Integrated in Build

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

## Task 12 :

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Work items

Search

Gift of the givers foun... +

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings

Recently updated

Back to Work Items

12 of 12

TASK 33

33 Implement changes

Mosete Masemola

0 Comments Add Tag

Save Follow

Updated by Mosete Masemola: Yesterday

State: New

Area: Gift of the givers foundation/Alternative team

Reason: New

Iteration: Gift of the givers foundation/Feedback

Details

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Planning

Priority: 2

Activity: Documentation

Effort (Hours)

Original Estimate: 6

Remaining: 3

Completed

Implementation

Integrated in Build

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

## • BOARDS

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Boards

Search

Gift of the givers foun... +

Overview

Boards

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Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Alternative team

Board Analytics

View as backlog

Stories

New

Active

Resolved

Closed

+ New item

19 User two

New

Sydney Sediele

0/2

23 User 3

New

Mosete Masemola

0/2

27 QA tester

New

Sydney Sediele

0/2

31 Stakeholder

New

Mosete Masemola

0/2

15 User

Active

Mosete Masemola

0/2

11 Project manager

Closed

Sydney Sediele

0/2

## • BACKLOG

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Backlogs

Gift of the givers foundation Team

Backlog Analytics

Filter by keyword

Order	Work Item Type	Title	State	Story...	Value Area	Iteration Path	Tags
1	User Story	User	Active		Business	Gift of the givers foundation/Use...	
2	User Story	User two	New		Business	Gift of the givers foundation/Di...	
3	User Story	User 3	New		Business	Gift of the givers foundation/Do...	
4	User Story	QA tester	New		Business	Gift of the givers foundation/Test...	
5	User Story	Stakeholder	New		Business	Gift of the givers foundation/Fee...	

Stories

Planning

Drag and drop work items to include them in a sprint.

Gift of the givers foundation Team b

User registration and login 9/2/2024  
Planned Effort: 0 5 w

Disaster incident report frame 9/9/2024  
Planned Effort: 0

Donation and volunteer frame 9/16/2024  
Planned Effort: 0

Testing and bug fixing 9/23/2024 - 9/30/2024  
Planned Effort: 0 5 working days

Feedback 9/30/2024 - 10/6/2024  
Planned Effort: 0 5 working days

## • SPRINTS

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Sprints

Gift of the givers foundation Team

Taskboard Backlog Capacity Analytics

User registration and login Person: All

September 2 - September 8  
5 work days remaining

Collapse all

New 10

Active

Closed

15 User Active  
Mosete Masem... 10

16 Implement registration form New  
Mosete Masem... 5

17 Store registration details in the database New  
Mosete Masem... 5

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Sprints

Gift of the givers foundation Team

Taskboard Backlog Capacity Analytics

User registration and login

September 2 - September 8  
5 work days remaining

Order	Title	State	Assigned To	Rem...
1	User	Active	Mosete Masem... 10	
	Implement registration form	New	Mosete Masem... 5	
	Store registration details in the database	New	Mosete Masem... 5	

Azure DevOps ST10179192 / Gift of the givers foundation / Boards / Sprints

Gift of the givers foundation Team

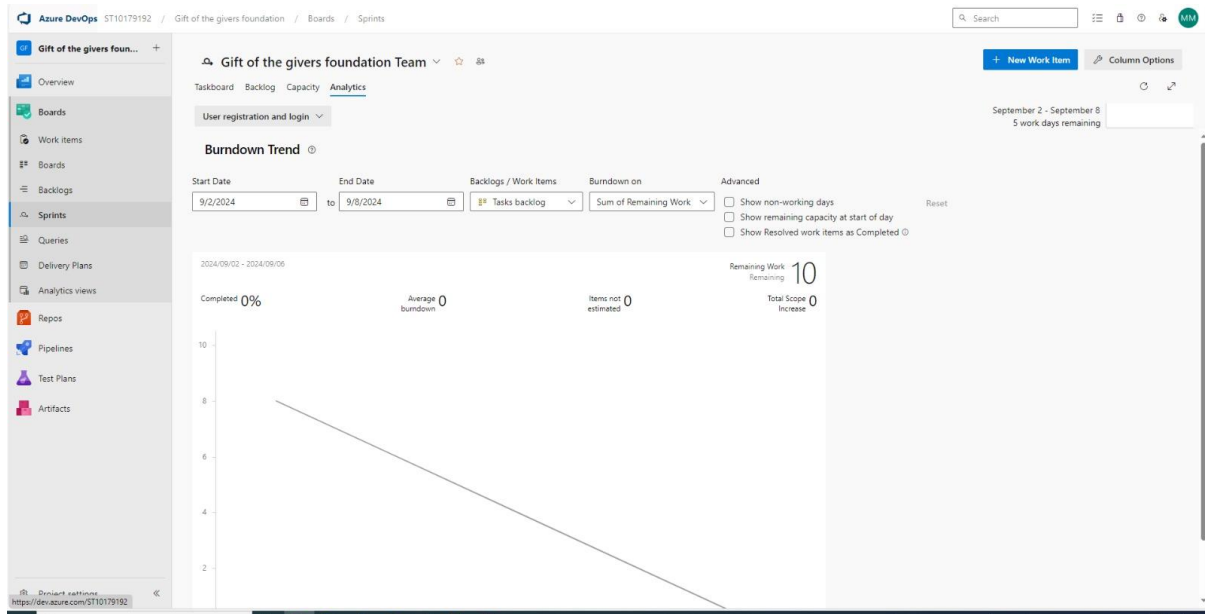
Taskboard Backlog Capacity Analytics

User registration and login

September 2 - September 8  
5 work days remaining

User	Days off	Activity	Capacity per day
Mosete Masemola	0 days	Unassigned	0
Sydney Sediela	0 days	Unassigned	0

Team days off 0 days These days off apply to the whole team



## • DASHBOARD

**Dashboards**

Name	Owner	Description	Last Accessed Date	Last Configured
Overview	Gift of the givers foundation		Today	Today Mosete Masemola
Overview	Alternative team		Today	Today Mosete Masemola

### 1.3.

Define clear goals and deliverables for each sprint to ensure progress and accountability :

#### Sprint 1: Requirements & Design

- **Goal:** Establish a clear understanding of project requirements and design the application.
- **Deliverables:** Requirements document, UI design mockups, and database schema.

#### Sprint 2: User Registration & Login

- **Goal:** Implement basic user functionality for registration and login.
- **Deliverables:** Functional user registration and login frames, with data stored in the database.

#### Sprint 3: Disaster Incident Report Frame



- **Goal:** Enable users to report disaster incidents via the application.
- **Deliverables:** A fully functional disaster incident report frame.

#### **Sprint 4: Donation & Volunteer Frames**

- **Goal:** Implement functionalities for users to donate and volunteer.
- **Deliverables:** Donation and volunteer frames fully integrated with the database.

#### **Sprint 5: Testing & Bug Fixing**

- **Goal:** Ensure the application is bug-free and works as expected.
- **Deliverables:** Completed testing cycles, bug reports, and fixes.

#### **Sprint 6: Feedback & Refinements**

- **Goal:** Gather user feedback and refine the application based on it.
- **Deliverables:** Implemented refinements and updated application.

This setup will help you keep the project on track, with clear goals and deliverables for each sprint ensuring progress and accountability.

## **QUESTION 2**

### **2.1.**

#### **Understanding Database Design Principles**

##### **Importance of Database Design:**

1. **Efficiency:**
  - Proper database design ensures that data retrieval and manipulation operations are fast and consume fewer resources. This is critical for web applications where performance can significantly impact user experience.
2. **Scalability:**
  - A well-designed database can handle increasing amounts of data and users without significant performance degradation. This is important for the Gift of the Givers Foundation web application as it grows in user base and functionality.
3. **Data Integrity:**
  - Database design principles like normalization and referential integrity help maintain the accuracy and consistency of data over time, ensuring that the data remains reliable and trustworthy.

- **Key Database Design Principles:**

1. **Normalization:**

- The process of organizing data to reduce redundancy and improve data integrity. It involves dividing large tables into smaller, related tables and defining relationships between them.
- For example, instead of storing user and donation information in the same table, you would create separate tables for users and donations, linking them with a foreign key.

## 2. Indexing:

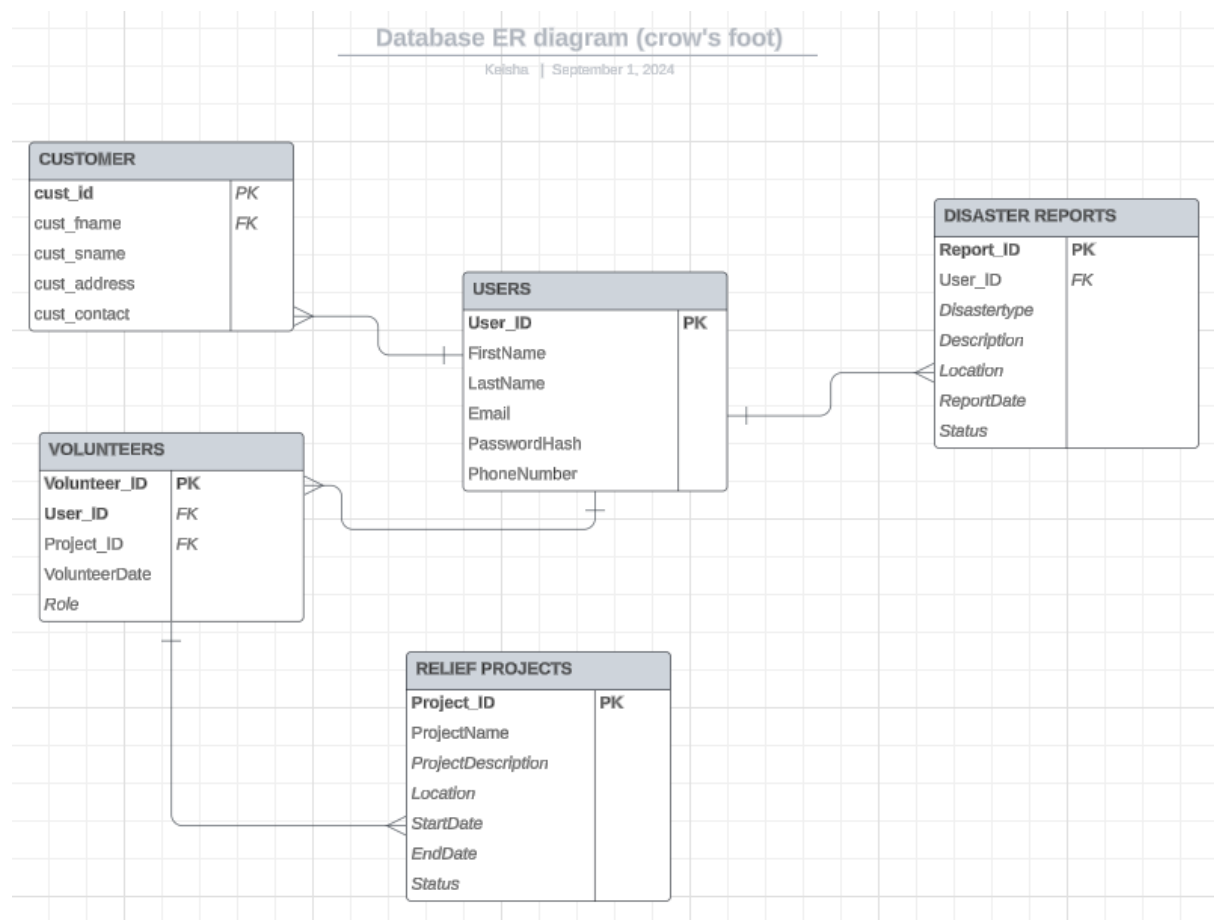
- Indexes are used to speed up data retrieval operations. They act as lookup tables, allowing the database to find data more quickly.
- For example, indexing the email column in the Users table would allow the application to quickly find users based on their email address.

## 3. Referential Integrity:

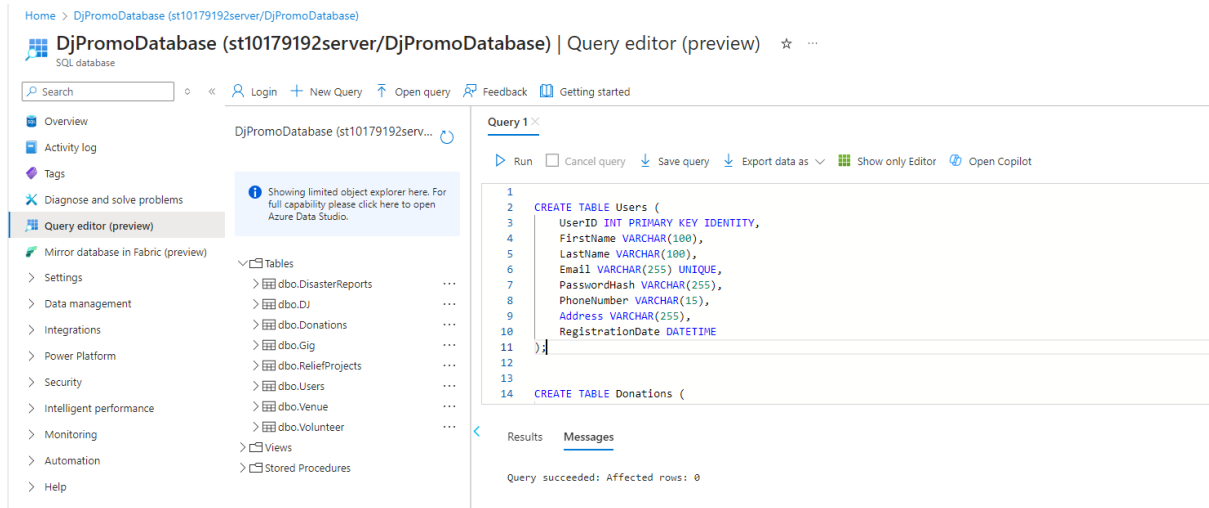
- Ensures that relationships between tables remain consistent. This means that foreign keys in a child table must have corresponding values in the parent table.
- For example, if a Donations table references a User, referential integrity ensures that every donation is linked to a valid user.

## 2.2.

### • ERD



### • DATABASE



## -- Create Users Table

**CREATE TABLE Users (**

**UserID INT PRIMARY KEY IDENTITY,**

**FirstName VARCHAR(100),**

**LastName VARCHAR(100),**

**Email VARCHAR(255) UNIQUE,**

**PasswordHash VARCHAR(255),**

**PhoneNumber VARCHAR(15),**

**Address VARCHAR(255),**

**RegistrationDate DATETIME**

**);**

## -- Create Donations Table

**CREATE TABLE Donations (**

**DonationID INT PRIMARY KEY IDENTITY,**

**UserID INT,**

**DonationAmount DECIMAL(10, 2),**

**DonationType VARCHAR(50),**

```
    DonationDate DATETIME,  
    FOREIGN KEY (UserID) REFERENCES Users(UserID)  
);
```

-- Create ReliefProjects Table

```
CREATE TABLE ReliefProjects (  
    ProjectID INT PRIMARY KEY IDENTITY,  
    ProjectName VARCHAR(255),  
    ProjectDescription TEXT,  
    Location VARCHAR(255),  
    StartDate DATETIME,  
    EndDate DATETIME,  
    Status VARCHAR(50)  
);
```

-- Create Volunteer Table

```
CREATE TABLE Volunteer (  
    VolunteerID INT PRIMARY KEY IDENTITY,  
    UserID INT,  
    ProjectID INT,  
    VolunteerDate DATETIME,  
    Role VARCHAR(100),  
    FOREIGN KEY (UserID) REFERENCES Users(UserID),  
    FOREIGN KEY (ProjectID) REFERENCES ReliefProjects(ProjectID)  
);
```

**-- Create DisasterReports Table**

```
CREATE TABLE DisasterReports (  
    ReportID INT PRIMARY KEY IDENTITY,  
    UserID INT,  
    DisasterType VARCHAR(100),  
    Description TEXT,  
    Location VARCHAR(255),  
    ReportDate DATETIME,  
    Status VARCHAR(50),  
    FOREIGN KEY (UserID) REFERENCES Users(UserID)  
);
```

**2.3.**

## **Optimizing Database Performance**

### **Optimization Techniques:**

#### **1. Indexing Strategies:**

- Create indexes on frequently searched columns such as email in the Users table, User\_ID in the Donations table, and Project\_ID in the Volunteer table.
- Consider composite indexes for queries involving multiple columns, e.g., Users and DonationDate in the Donations table.

#### **2. Query Optimization:**

- Use efficient SQL queries by avoiding SELECT \* statements and only retrieving necessary columns.
- Optimize JOIN operations by ensuring indexed columns are used in JOIN conditions.
- Analyze and refactor complex queries to reduce execution time.

#### **3. Partitioning:**

- For large tables like Donations or DisasterReports, consider partitioning based on date or another logical segment. Partitioning can improve query performance by reducing the amount of data the database engine needs to scan.

4. **Caching:**

- Implement caching for frequently accessed data to reduce database load, especially for static or rarely updated data.