APPR6312 POE PART 1

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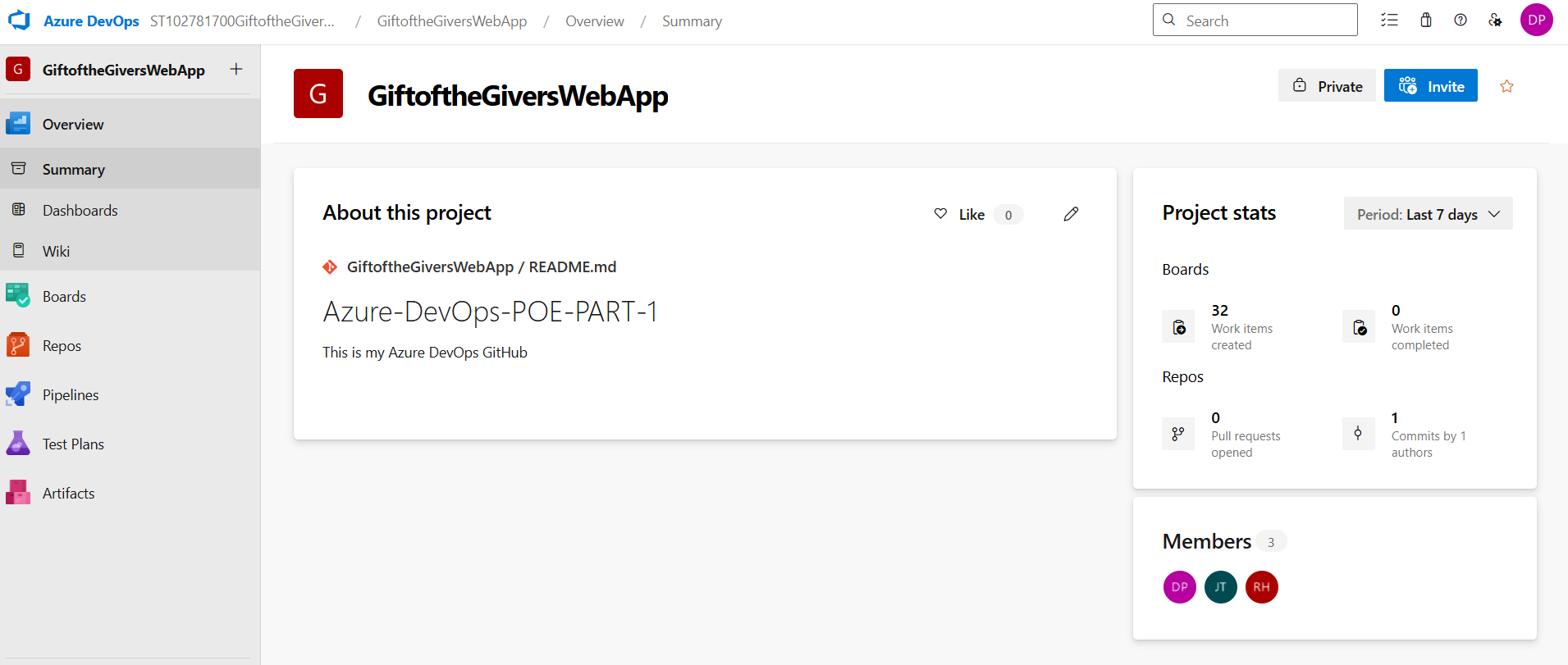
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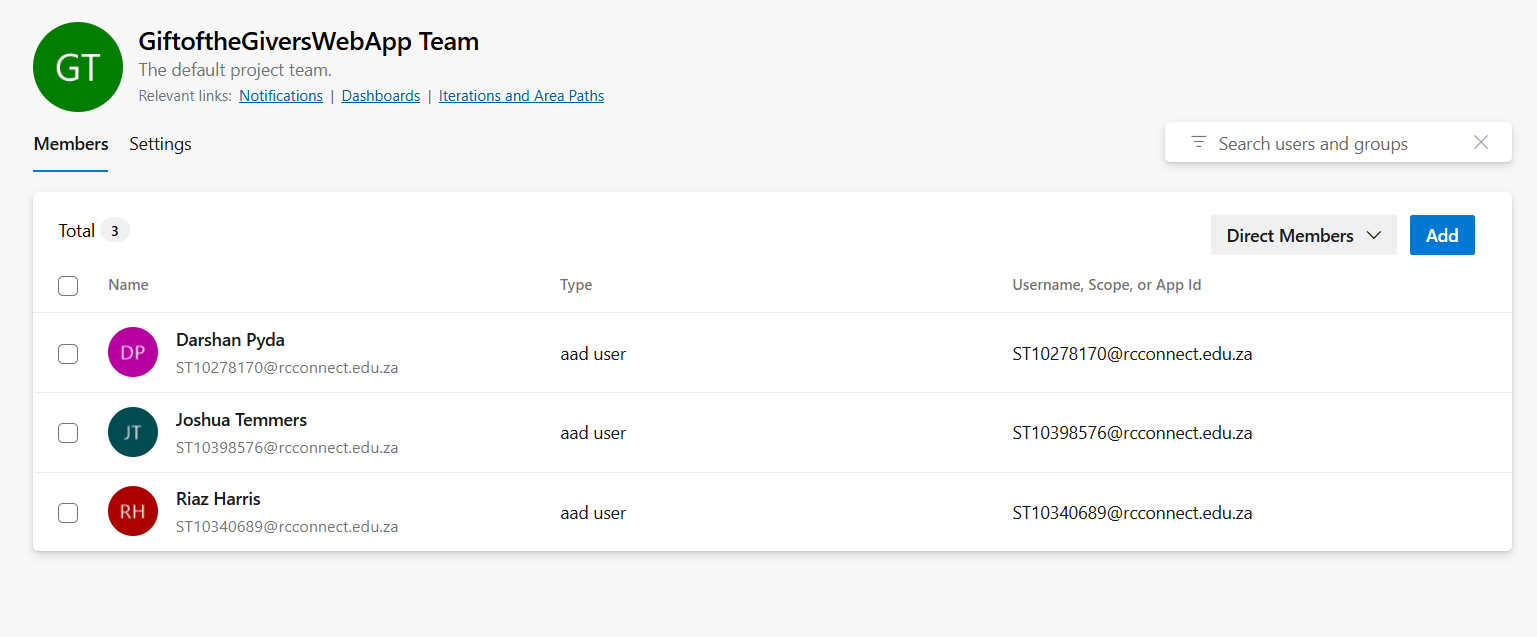
[***Bibliography*** 8](#_Toc207743277)

# Project Azure DevOps Page – Section A



This is the Home Page, creation of GiftoftheGivers Website Project Planning.   
Here the GitHub link and README. File is visible alongside the *Team Members and Project Stats* (Both on the Right-Hand Side).

Team Members Page



For the Teams Members, by default it is only me, however I have placed some members here just for task duty.

## Backlogs Page (Epic’s, Features, User Stories & Tasks)

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On this specific page, I am only showing ***3 EPIC’s, 3 FEATURE’S , 3 USER STORIES and 3 TASKS*** each Individually.   
I have a total of 7 EPIC’s, more pictures displayed below;

### Backlogs Page Picture 2

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AI-generated content may be incorrect.

The other four ***EPIC’s*** namely;

***4 – Resource Allocation   
5 – Reporting & Dashboards  
6 – Authentication & Security  
7 – Non-Functional Requirements***

### Backlogs Page Picture 3

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The other four ***Feature’s*** namely;

***4 – Resource Allocation – Concept  
5 – Reporting & Dashboards – Concept  
6 – Authentication & Security – Concept  
7 – Non-Functional Requirements – Concept***

### Backlogs Page Picture 4

A screenshot of a computer

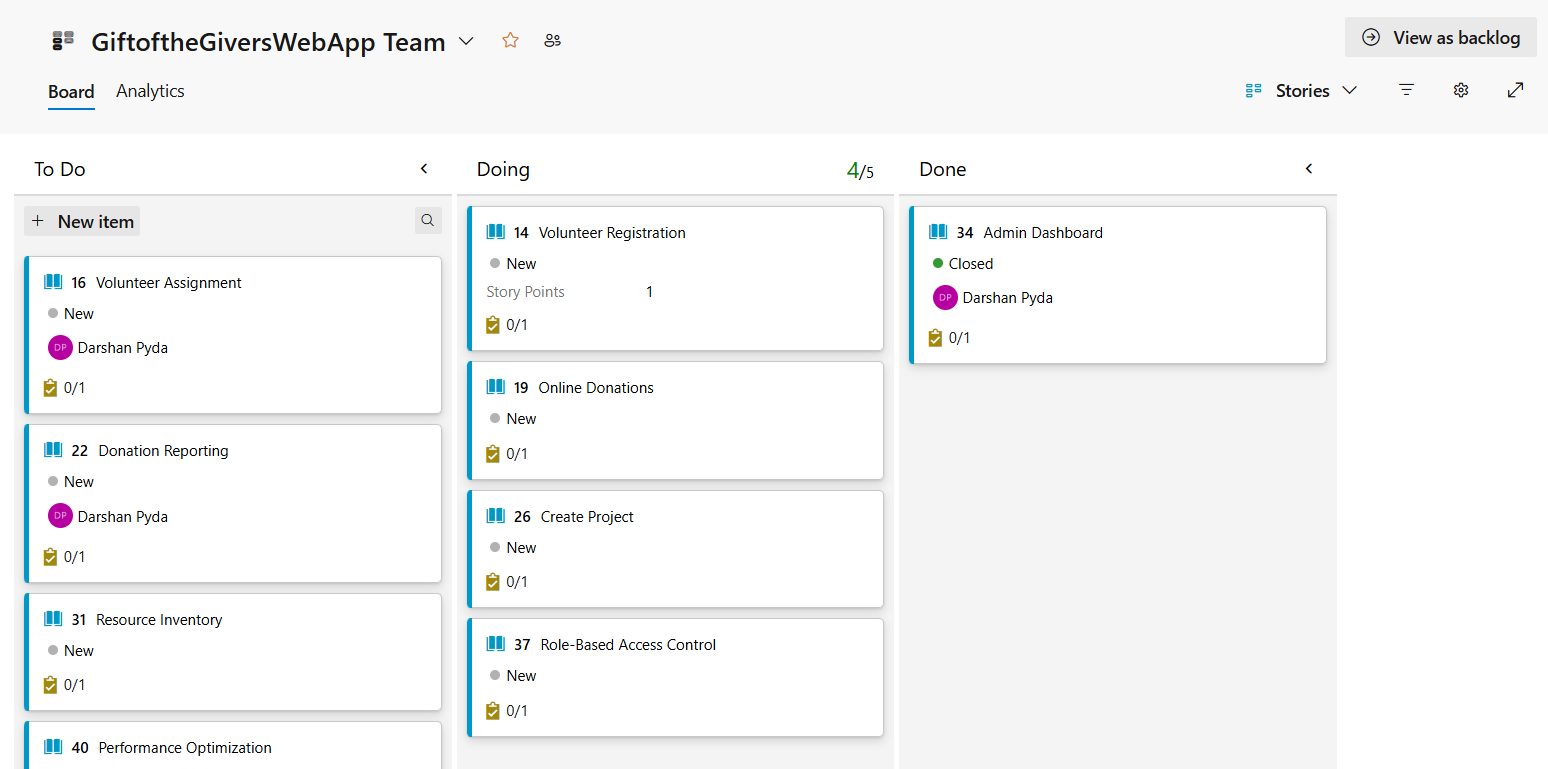
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On this page, I have 9 ***USER STORIES***, some of the EPIC’s have one or more User Stories placed as sub-categories.

These are all the pre-requisites before task handling and allocations.

As shown on the Right-Hand Side, the Iterations are either phased by (Sprint 1 – Sprint 3), (Week 1 – 6).

## Board Page



Screenshot of Board.

## Explanation on sprint goals and prioritization

***Sprints Goal 1***: This goal firstly focuses on Authentication & Security, Volunteer Management and Donation Management, ensuring that security role-based access control and registration is secure, for volunteer management, all potential users can sign up with relevant contact info, skills and availability on each profile for maintenance and documentation upload. Lastly for Donations Processing, an access profile with payments gateway creation and final receipt invoice plus confirmation email.

***Prioritization Level***: High Priority (Immediate Effect) – Authentication & Security, Volunteering Registrations and lastly Donations Processes.

***Sprints Goal 2***: This goal focuses on Relief Management and Resource Inventory, ensuring that all projects are created and tracked by means of location, needs and status, along with volunteers to each individual project. As for the Inventory all in & out supplies need tracking and stock levels maintenance is a must for GiftoftheGivers.

***Prioritization Level:*** Medium Priority (Secondary Effect) – Relief Project Management and Resource Inventory.

***Sprints Goal 3***: This goal focuses on Reporting & Dashboards and Non-Functional Requirements, ensuring that dispatch planning is on schedule and all deliverables are tracked with supplies. As for other dashboards and exports, plus any non-functional requirements like basic security measures.

***Prioritization Level:*** Low Priority (Third Effect) – Reporting & Dashboards and Non-Functional Requirements.

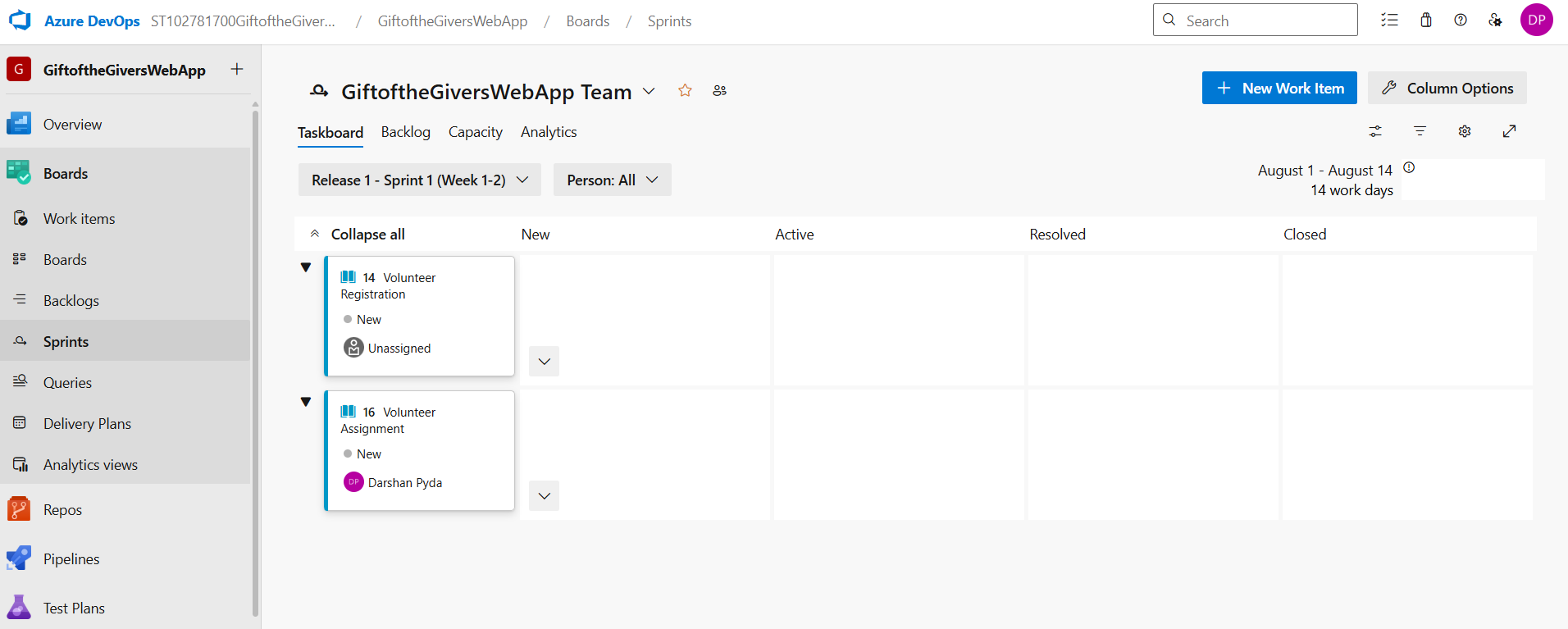
# Sprints Main Page

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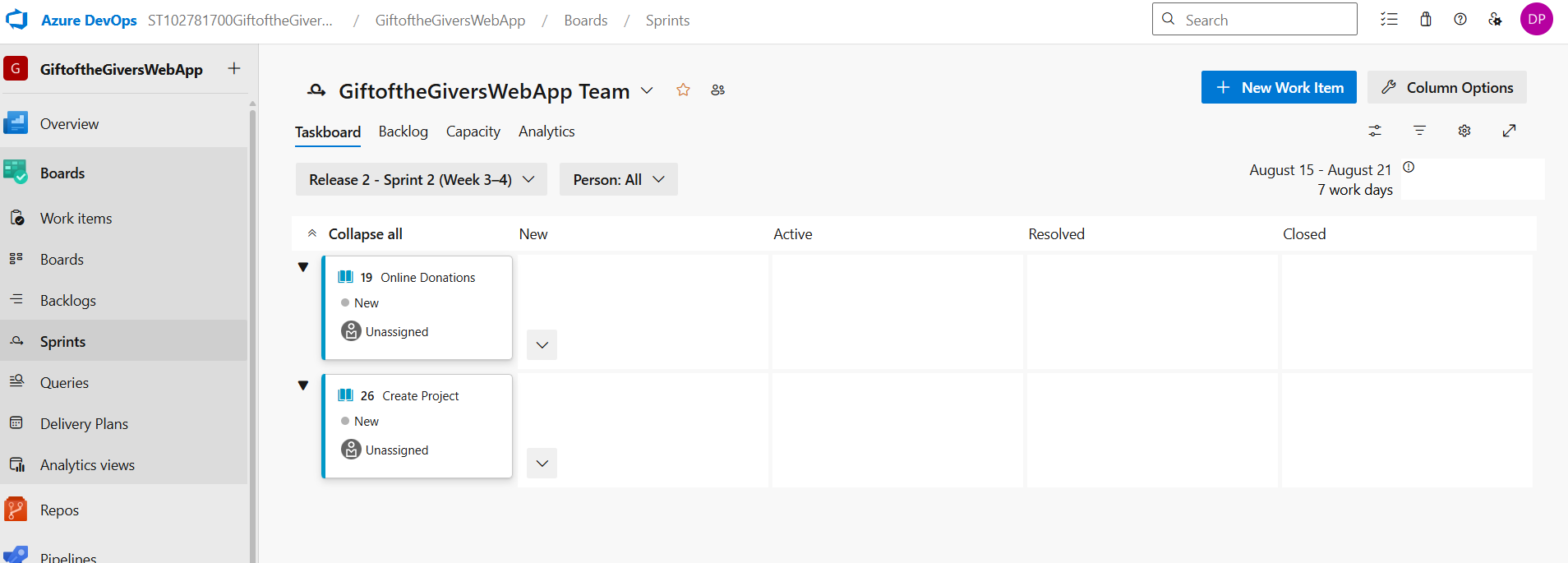
In the above image, we can see the Sprints tier created, namely;   
***Release 1 – Sprint (Week 1-2)*** **& *Release 2 – Sprint (Week 3-4) & Release 3 – Sprint (Week 5-6)***

## Release 1 – Sprint (Week 1-2)



The start of the first Sprint is from the ***1st of August – 14th August*** as seen on the right-hand side of the image. There are two tasks that are needed to be completed in the first Sprint, both of which fall under the Volunteer Management EPIC. Specifically, the ***Registration Task*** and ***Assignment Task***.

## Release 2 – Sprint (Week 3-4)



The start of the second Sprint is from the ***15th of August – 21st August*** as seen on the right-hand side of the image. There are two tasks that are needed to be completed in the second Sprint, both of which fall under the Online Donations and Project Management EPIC. Specifically, the ***Online Funding Task*** and ***Create Project Task***.

## Release 3 – Sprint (Week 5-6)

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The start of the third and last Sprint is from the ***22nd of August – 31st August*** as seen on the right-hand side of the image. There are two tasks that are needed to be completed in the last Sprint, both of which fall under the Online Donations, Resource Management, Inventory and Security Authentication EPIC. Specifically, the ***Online Reporting Task***, ***Inventory Task*** and **Role-based Task**.

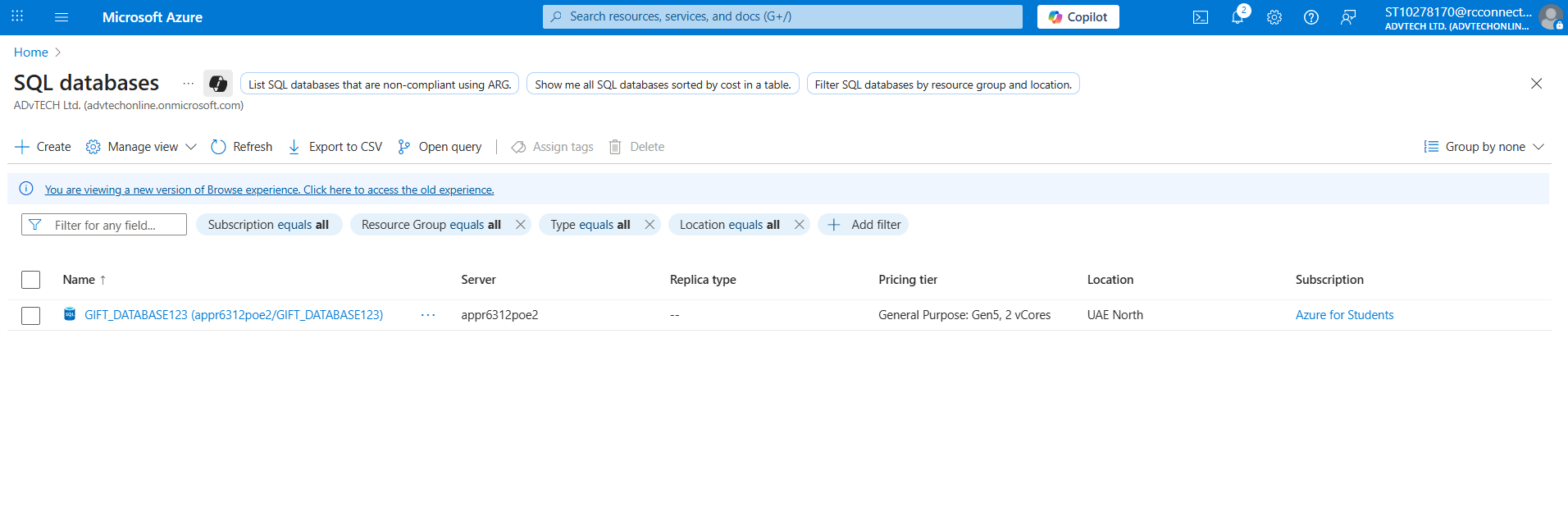
# Azure SQL Server Database – Section B

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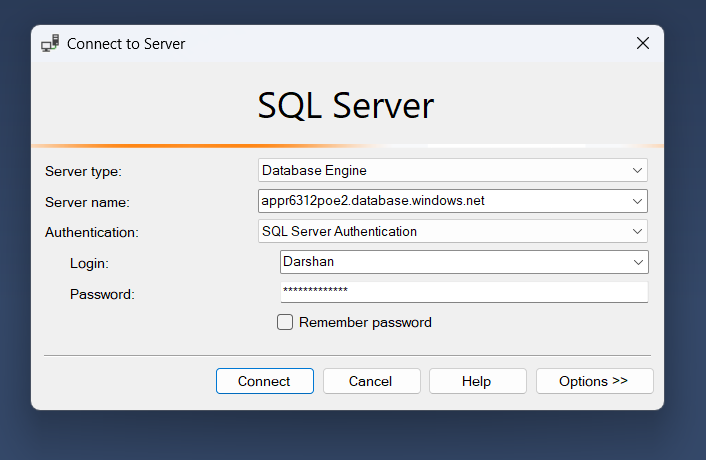
This is an image of the Home SQL Server Database on Azure DevOps. The name of my database is ***GIFT-DATABASE123***, and I make use of a server called ***appr6312poe2.database.windows.net*** for an SQL 2019 authentication log in.

## Resource Group Picture



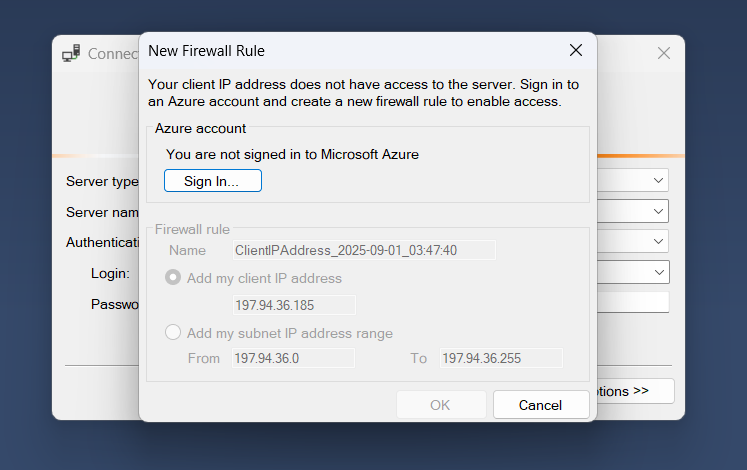
As shown here I have only created one specific database to match the requirements of the GiftoftheGivers project plan initiative.   
Namely; ***GIFT-DATABASE123***.

# SQL Server Networking

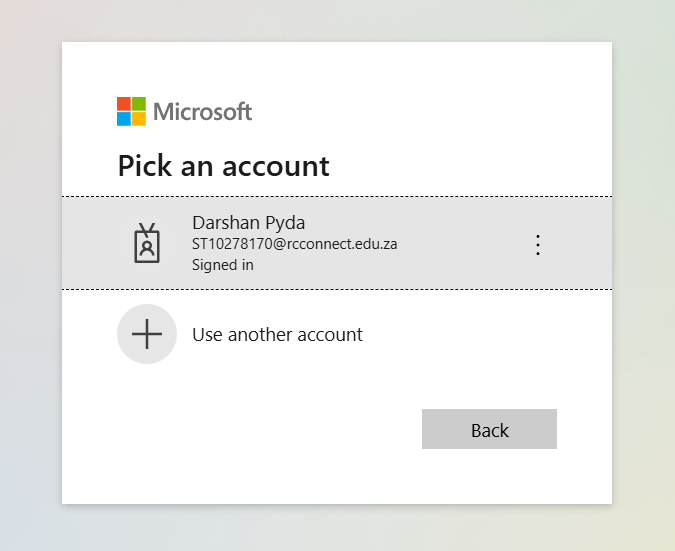


The above picture shows the connection to SQL Server using the created server name: ***appr6312poe2.database.windows.net***   
and admin who is Darshan. Below are more pictures with explanations on the SQL firewall networking.

## New Firewall Rule Picture



Once connected to SQL Server a Sign-in to Microsoft Azure is required to link the Client IP Address.

A white background with black text

AI-generated content may be incorrect.A screenshot of a computer

AI-generated content may be incorrect.In the above pictures, the registration to Microsoft is successful and once the Authentication is completed, the New Firewall Rule allows for Azure DevOps to work on SQL 2019 Server.

## SQL Database Connection to Azure DevOps

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Here in the above picture the Azure SQL database is connected successfully to SQL 2019.   
Which allows for the tables creation of Identify entities: Users, Volunteers, Incidents, Projects, Donations, under groups of data placements in different table names, multiple columns, many data types and singular primary keys.

# ERD Diagram Tables

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This is the ERD Diagram based on the SQL Tables.

## Business Rules of the ERD Diagram

***Users & Roles***

* Each **User** must belong to one specific **role** like an Admin, Volunteer or Donor.
* A **Role** duty can belong to multiple **Users**.
* **Business Rule** = Each User has one role, but roles can be given to many Users.

***Users & Volunteers***

* A **Volunteer** is linked to a **User**.
* Not all **Users** are **volunteers** like donors and admins in particular.
* **Business Rule** = A Volunteer is a user, but not all the users are Volunteers.

***Projects & Users***

* All **Projects** are created by **users** like the owner or specific creator.
* A **User** can have many **Projects**.
* **Business Rule** = Projects created by users, but Users can create multiple projects.

***Volunteers & Projects***

* **Volunteers** can have many **project** designations.
* Each individual **project** has multiple **Volunteers**.
* (**Many-to-Many relationship**, implementation by ProjectAssignments).
* **Business Rule** = Volunteers assigned to many projects, but projects may include many volunteers.

***Resources & Projects***

* **Resources** like equipment, supplies, inventory are not limited to **projects** but through **ResourceTransactions**.
* **Projects** can use many resources, and a type/range of **resources** can be utilized in multiple projects.
* **Business Rule** = Resources are used or given to projects through certain transactions.

***Donations & Users***

* Donations are given by many **Users**.
* A **single user** may fund many donations.
* **Business Rule** = Users can make many donations, but each individual donation belongs to specific users only.

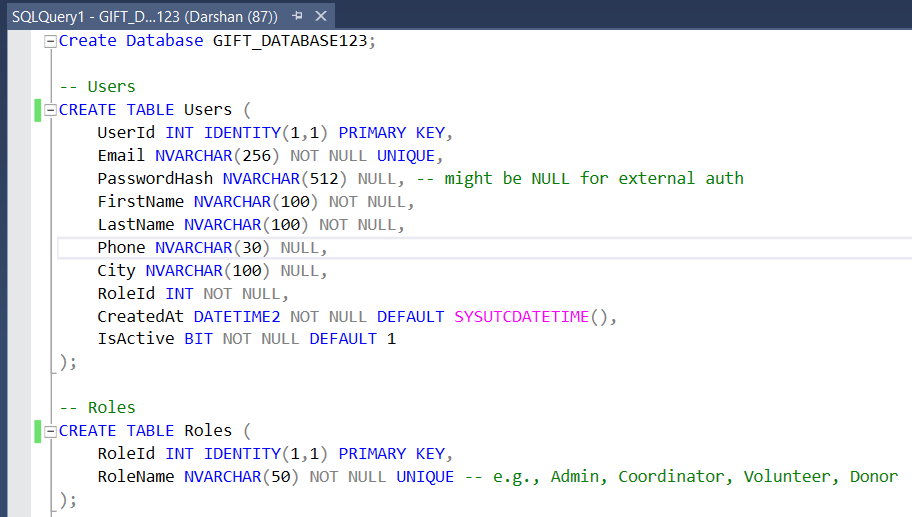
***Donations & Projects***

* Donations are provided to projects through **DonationsAllocations**.
* Donations are divided across many projects.
* Projects can be funded through single/many donations.
* **Business Rule** = Donations are allocated to single/more projects, but projects receive funding from multiple donations.

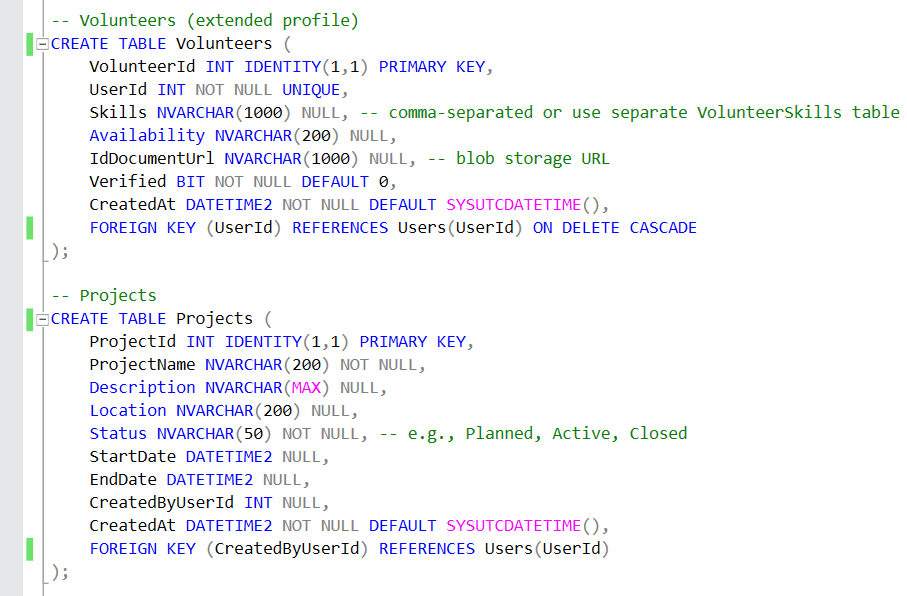
***Audit Logs & Users***

* All **Audits** belong to a **User** who done the work.
* **Business Rule** = All activities are logged alongside the person/user, whom details are either old or new.

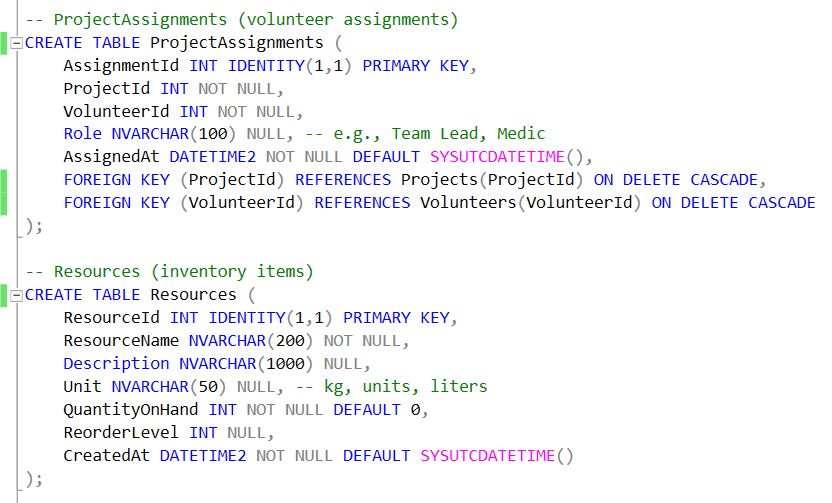
## SQL Tables



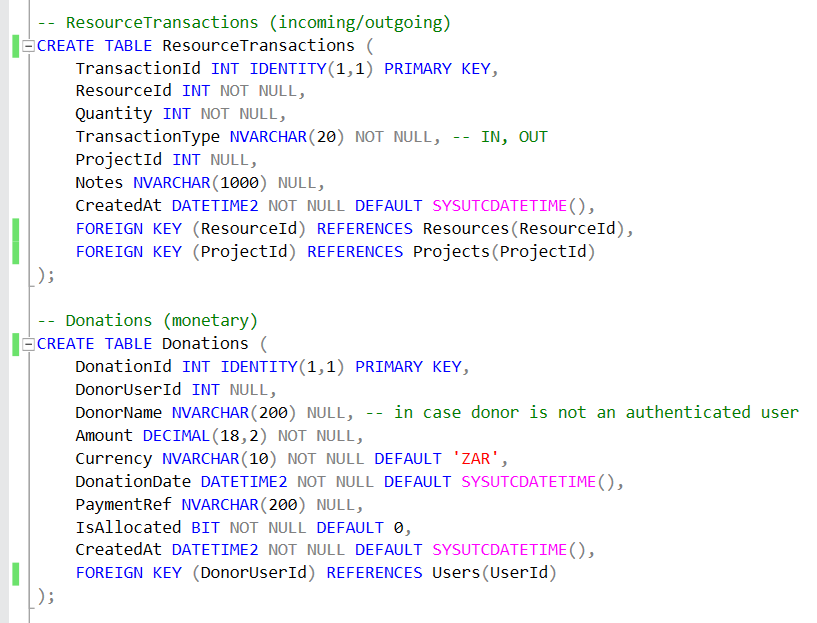
In the above picture is the Data Type Users and Roles, as two different tables are created from them each and with their own primary keys and other necessary attributes for the GiftoftheGivers Project Website. Also the Database was created at the top of the picture.



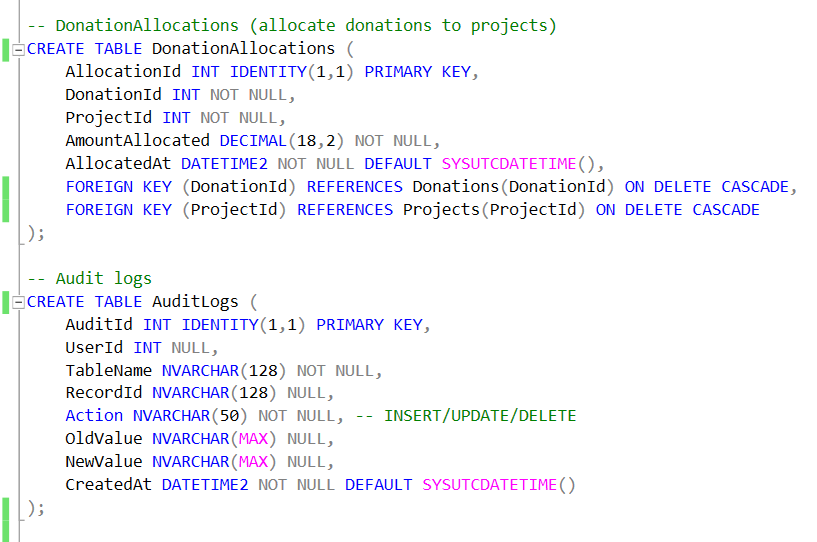
Here we have the Project and Volunteers Data Types each with its own tables and attributes required.



Here we have the Resources and ProjectAssignments Data Types and table attributes required.



Here we have the Donations and ResourceTransactions Data Type, and table attributes required.



Here we have the AuditLogs and DonationsAllocations Data Type, and table attributes required.

# Short Explanations on Efficiency, Scalability and Integrity

***Efficiency*** – refers to the best way to maximise the use resources in anything, in terms of this case we refer to how the task was completed, maintained, backed by evidence and relevant to importance of project management aspects of GiftoftheGivers Website and Azure DevOps Database.

***Scalability*** – refers to the ability of any system or performance increase in relation to something, in terms of this case we refer to how the standard of work is in relation to the basic settings of GiftoftheGivers website and any related data usage.

***Integrity*** – refers to accurate whole and unchanged information which is primarily trustworthy and follows-up continuously, in terms of the case according to GiftoftheGivers Project Management plans, we focus on real facts, functions and raw data from our sources provided below.

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