

Azure DevOps Assignment

- Ashwin Harish P

Part 1 - Work Item Breakdown

Epics:

Filter by keyword						Epic	Assigned to	States	Area	Tags	×
ID	Title	↑	Assigned To		State	Area Path		Tags			
86	👑 User Operations		👤 Ashwin Harish		● New	BankingApplication					

Features:

Filter by keyword						Feature	Assigned to	States	Area	Tags	×
ID	Title	↑	Assigned To		State	Area Path		Tags			
87	🏆 Account Creation		👤 Ashwin Harish		● New	BankingApplication					
91	🏆 Transaction History		👤 Ashwin Harish		● New	BankingApplication					
90	🏆 Transfer Funds		👤 Ashwin Harish		● New	BankingApplication					
88	🏆 User Login		👤 Ashwin Harish		● New	BankingApplication					
89	🏆 View Account Balance		👤 Ashwin Harish		● New	BankingApplication					

User Stories:

Recently updated ▾

+ New Work Item ▾

↩ Open filtered view in Queries

🔗 Column Options

↑ Import Work Items

🗑 Recycle Bin

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Filter by keyword

User Story ▾

Assigned to ▾

States ▾

Area ▾

Tags ▾

✕

ID	Title	↑	Assigned To	State	Area Path	Tags
93	🔑 Admin Approval Page		👤 Ashwin Harish	● New	BankingApplication	
95	🔑 Creating Count for Unsuccesfull Attempts		👤 Ashwin Harish	● New	BankingApplication	
104	🔑 Exporting Transaction Details		👤 Ashwin Harish	● New	BankingApplication	
103	🔑 Filter Transaction based on Reciver AccNo		👤 Ashwin Harish	● New	BankingApplication	
102	🔑 Filtering Transaction Based on Month		👤 Ashwin Harish	● New	BankingApplication	
96	🔑 Lock Account After Multiple Failed Login Attempts		👤 Ashwin Harish	● New	BankingApplication	
97	🔑 Notify via SMS for Failed Attempts		👤 Ashwin Harish	● New	BankingApplication	
99	🔑 Processing Fund Transactions		👤 Ashwin Harish	● New	BankingApplication	
92	🔑 Registration and Account Creation		👤 Ashwin Harish	● New	BankingApplication	
98	🔑 Validating Transfer Details		👤 Ashwin Harish	● New	BankingApplication	
94	🔑 Validating User with AccNo and PIN		👤 Ashwin Harish	● New	BankingApplication	

Tasks:

Recently updated | + New Work Item | Open filtered view in Queries | Column Options | Import Work Items | Recycle Bin

Filter by keyword						Task	Assigned to	States	Area	Tags	
ID	Title		Assigned To	State	Area Path	Tags					
113	Adding user details to the database		Ashwin Harish	New	BankingApplication						
124	Check the user is validated		Ashwin Harish	New	BankingApplication						
118	count the number of unsuccessful login attempts		Ashwin Harish	New	BankingApplication						
107	Create API between registration page and database		Ashwin Harish	New	BankingApplication						
105	Create Registration UI for Users		Ashwin Harish	New	BankingApplication						
110	Create UI for admin page		Ashwin Harish	New	BankingApplication						
132	Display entire transaction and complete summary		Ashwin Harish	New	BankingApplication						
127	Display message if validation fails		Ashwin Harish	New	BankingApplication						
139	Export entire transaction details as a CSV file		Ashwin Harish	New	BankingApplication						
137	Filter Transaction History based on 1 year before		Ashwin Harish	New	BankingApplication						
135	Filter Transaction History based on 3 months before		Ashwin Harish	New	BankingApplication						

Filter by keyword						Task	Assigned to	States	Area	Tags	
ID	Title		Assigned To	State	Area Path	Tags					
136	Filter Transaction History based on 6 months before		Ashwin Harish	New	BankingApplication						
133	Filter Transaction History based on current month		Ashwin Harish	New	BankingApplication						
134	Filter Transaction History based on last month		Ashwin Harish	New	BankingApplication						
138	Filter Transaction History based on reciver AccNo		Ashwin Harish	New	BankingApplication						
121	If the threshold exceeds the limit, lock the account		Ashwin Harish	New	BankingApplication						
128	Initiate Fund Transfer		Ashwin Harish	New	BankingApplication						
108	Notify to account admin		Ashwin Harish	New	BankingApplication						
116	Return True if matches else False		Ashwin Harish	New	BankingApplication						
130	Rollback the amount if the payment interrupted or fails		Ashwin Harish	New	BankingApplication						
131	Send message to the sender about the fund status		Ashwin Harish	New	BankingApplication						
123	Send SMS and mail for locked accounts		Ashwin Harish	New	BankingApplication						

Filter by keyword						Task	Assigned to	States	Area	Tags	
ID	Title		Assigned To	State	Area Path	Tags					
131	Send message to the sender about the fund status		Ashwin Harish	New	BankingApplication						
123	Send SMS and mail for locked accounts		Ashwin Harish	New	BankingApplication						
117	Set the threshold unsuccessful login limit to 5		Ashwin Harish	New	BankingApplication						
129	Update the balance of sender and reciver		Ashwin Harish	New	BankingApplication						
122	Update the user flag in the database		Ashwin Harish	New	BankingApplication						
111	User JWT secure authentication		Ashwin Harish	New	BankingApplication						
114	Validate AccNo and PIN		Ashwin Harish	New	BankingApplication						
115	Validate AccNo exist in the DB and PIN matches		Ashwin Harish	New	BankingApplication						
126	Validate reciver AccNo		Ashwin Harish	New	BankingApplication						
125	Validate the transfer amount and bank balance		Ashwin Harish	New	BankingApplication						
106	Validating Inputs		Ashwin Harish	New	BankingApplication						
112	Validating user details		Ashwin Harish	New	BankingApplication						

Part 2 - Azure DevOps Git Setup

Cloning Repository

```
PS C:\Users\My Pc\Desktop\banking-app> git clone git@ssh.dev.azure.com:v3/ashwinharishp/BankingApplication/BankingApplication
Cloning into 'BankingApplication'...
remote: Azure Repos
remote: Found 40 objects to send. (37 ms)
Receiving objects: 100% (40/40), 5.35 KiB | 195.00 KiB/s, done.
Resolving deltas: 100% (12/12), done.
PS C:\Users\My Pc\Desktop\banking-app> █
```

Creating a new directory

```
PS C:\Users\My Pc\Desktop\banking-app> mkdir banking-app
```

Directory: C:\Users\My Pc\Desktop\banking-app

Mode	LastWriteTime	Length	Name
d-----	2025-07-07 11:21		banking-app

Adding Readme.md file

banking-app > Readme.md > ##### This is Readme.md file for Banking application

```
1 ##### This is Readme.md file for Banking application
2 This application holds
3 1. Account Creation
4 2. User Login
5 3. View Account Balance
6 4. Transfer Funds
7 5. Transaction History
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS C:\Users\My Pc\Desktop\banking-app> git commit -m "Added Readme.md file"
[master (root-commit) 6ce3c60] Added Readme.md file
2 files changed, 8 insertions(+)
create mode 160000 BankingApplication
create mode 100644 banking-app/Readme.md
PS C:\Users\My Pc\Desktop\banking-app> git push origin main
error: src refspec main does not match any
error: failed to push some refs to 'ssh.dev.azure.com:v3/ashwinharishp/BankingApplication/BankingApplication'
PS C:\Users\My Pc\Desktop\banking-app> git push origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 16 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 445 bytes | 445.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Validating commits... (1/1) done (1 ms)
remote: Storing packfile... done (77 ms)
remote: Storing index... done (47 ms)
remote: Updating refs... done (146 ms)
To ssh.dev.azure.com:v3/ashwinharishp/BankingApplication/BankingApplication
 * [new branch]      master -> master
PS C:\Users\My Pc\Desktop\banking-app> █
```

Adding app.py file


```
PS C:\Users\My Pc\Desktop\banking-app> git commit -m "Added app.py file"
[master 2dd5892] Added app.py file
 1 file changed, 31 insertions(+)
 create mode 100644 banking-app/app.py
PS C:\Users\My Pc\Desktop\banking-app> git push origin master
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 16 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 680 bytes | 340.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Analyzing objects... (4/4) (55 ms)
remote: Validating commits... (1/1) done (13 ms)
remote: Storing packfile... done (67 ms)
remote: Storing index... done (36 ms)
remote: Updating refs... done (163 ms)
To ssh.dev.azure.com:v3/ashwinharishp/BankingApplication/BankingApplication
 6ce3c60..2dd5892 master -> master
PS C:\Users\My Pc\Desktop\banking-app> █
```


Adding azure-pipelines.yml file

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

PS C:\Users\My Pc\Desktop\banking-app> git add .
PS C:\Users\My Pc\Desktop\banking-app> git commit -m "Added .yml file"
[master c3139b4] Added .yml file
 1 file changed, 16 insertions(+)
 create mode 100644 banking-app/azure-pipelines.yml
PS C:\Users\My Pc\Desktop\banking-app> git push origin master
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 16 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 596 bytes | 596.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Analyzing objects... (4/4) (94 ms)
remote: Validating commits... (1/1) done (0 ms)
remote: Storing packfile... done (85 ms)
remote: Storing index... done (46 ms)
remote: Updating refs... done (136 ms)
To ssh.dev.azure.com:v3/ashwinharishp/BankingApplication/BankingApplication
 2dd5892..c3139b4 master -> master
PS C:\Users\My Pc\Desktop\banking-app> █
```

Directory Structure

Name ↑	Last change	Commits
 banking-app	Just now	c3139b44 Added .yml file AshwinHarishP

Name ↑	Last change	Commits
PY app.py	3m ago	2dd5892a Added app.py file AshwinHarishP
 azure-pipelines.yml	Just now	c3139b44 Added .yml file AshwinHarishP
MD Readme.md	5m ago	6ce3c605 Added Readme.md file AshwinHarishP

This is Readme.md file for Banking application

This application holds

1. Account Creation
2. User Login
3. View Account Balance
4. Transfer Funds
5. Transaction History

Readme.md code

```
1 ##### This is Readme.md file for Banking application
2 This application holds
3 1. Account Creation
4 2. User Login
5 3. View Account Balance
6 4. Transfer Funds
7 5. Transaction History
```

app.py code

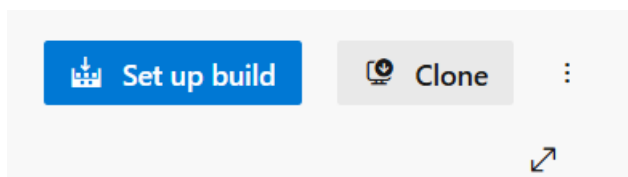
```
1 def main():
2     while True:
3         print("===== Banking Application =====")
4         print("1. Account Creation")
5         print("2. User Login")
6         print("3. View Account Balance")
7         print("4. Transfer Funds")
8         print("5. Transaction History")
9         print("6. Exit")
10
11         choice = input("Select an option (1-6): ")
12
13         if choice == "1":
14             create_account()
15         elif choice == "2":
16             login()
17         elif choice == "3":
18             view_balance()
19         elif choice == "4":
20             transfer_funds()
21         elif choice == "5":
22             view_transaction_history()
23         elif choice == "6":
24             print("Exiting application")
25             break
26         else:
27             print("Invalid option\n")
```

azure-pipelines.yml code

```
1 pool:
2   vmImage: ubuntu-latest
3
4 jobs:
5   - job: run_banking_application
6     displayName: Run Banking Application
7     steps:
8
9     - task: UsePythonVersion@0
10      inputs:
11        versionSpec: '3.10'
12        displayName: "Set up Python 3.10"
13
14     - script: |
15       python app.py
16       displayName: "Run Banking Application Script"
```

Part 3 - Configure CI/CD Pipeline

Step1: Click Set up Build



Step2: Select Existing Azure Pipelines YAML File

New pipeline

Configure your pipeline



Python package

Create and test a Python package on multiple Python versions.



Python to Linux Web App on Azure

Build your Python project and deploy it to Azure as a Linux Web App.



Starter pipeline

Start with a minimal pipeline that you can customize to build and deploy your code.



Existing Azure Pipelines YAML file

Select an Azure Pipelines YAML file in any branch of the repository.

Step 3: Choose path and click continue

Select an existing YAML file



Select an Azure Pipelines YAML file in any branch of the repository.

Branch

Path

Select a file from the dropdown or type in the path to your file

Step 4: Click Run

Variables

Run



It will run the pipeline

Run Banking Application

```
1  ##[error]No hosted parallelism has been purchased or granted. To request a free parallelism grant, please fill
2  Pool: Azure Pipelines
3  Image: ubuntu-latest
4  Started: Just now
5  Duration: 2s
6
7  ▶ Job preparation parameters
```