

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					
141	👑 Account Services			Ashwin Harish	New	BankingApplication						
142	👑 Fund Transfer			Ashwin Harish	New	BankingApplication						
144	👑 Security & Compliance			Ashwin Harish	New	BankingApplication						
143	👑 Transaction History			Ashwin Harish	New	BankingApplication						
140	👑 User Management			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						
153	👑 Account Lockout Mechanism			Ashwin Harish	New	BankingApplication						
148	👑 Account Opening and Maintenance Page			Ashwin Harish	New	BankingApplication						
154	👑 Data Encryption			Ashwin Harish	New	BankingApplication						
156	👑 Export Transaction			Ashwin Harish	New	BankingApplication						
150	👑 Initiate Fund Transfer			Ashwin Harish	New	BankingApplication						
149	👑 Interest and Loan informations			Ashwin Harish	New	BankingApplication						
147	👑 Password Reset			Ashwin Harish	New	BankingApplication						
151	👑 Updating Accounts after Transactions			Ashwin Harish	New	BankingApplication						
146	👑 User Authentication			Ashwin Harish	New	BankingApplication						
88	👑 User Login			Ashwin Harish	New	BankingApplication						
88	👑 User Login			Ashwin Harish	New	BankingApplication						
145	👑 User Registration			Ashwin Harish	New	BankingApplication						
89	👑 View Account Balance			Ashwin Harish	New	BankingApplication						
155	👑 View Transaction Details			Ashwin Harish	New	BankingApplication						

User Stories:

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 Unsucessfull 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						
101	 View Complete Transaction History		 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 unsucessfull 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	X
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	X
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 .yaml file"
[master c3139b4] Added .yaml 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 .yaml 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

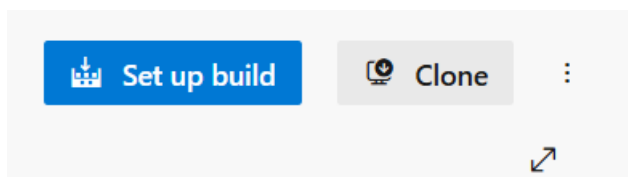
```
1 def main():
2     while True:
3         print("==== Banking Application =====")
4         print("1. Account Creation")
5         print("2. User Login")
6         print("3. View Account Balance")
7         print("4. Transfer Funds")
8         print("5. Transaction History")
9         print("6. Exit")
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

 master 

Path

/banking-app/azure-pipelines.yml 

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
```