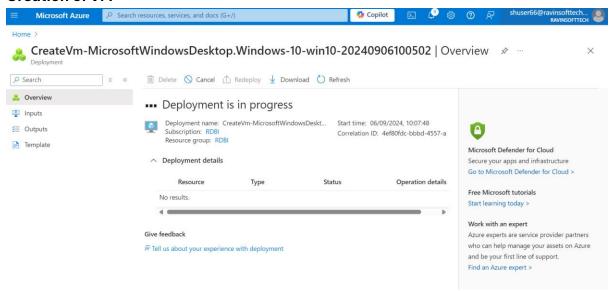
# **CASE STUDY**

Name: Insha Mustafa

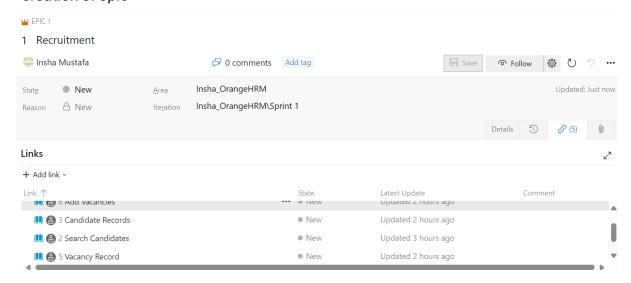
Date: 6th September 2024

#### Creation of VM

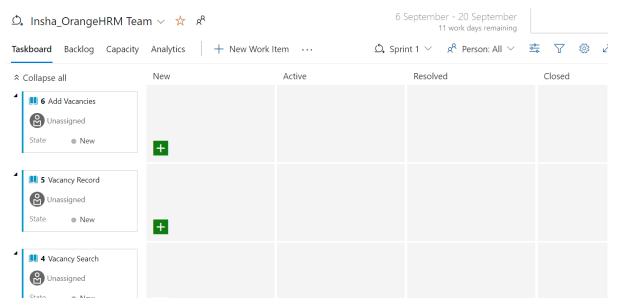


### Azure DevOps

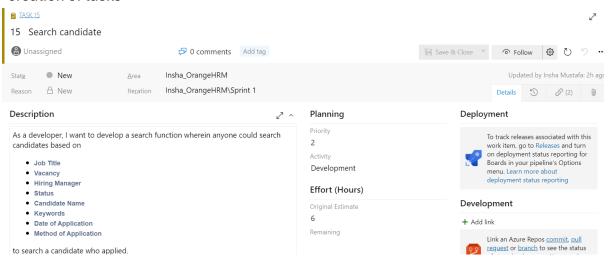
## -creation of epic



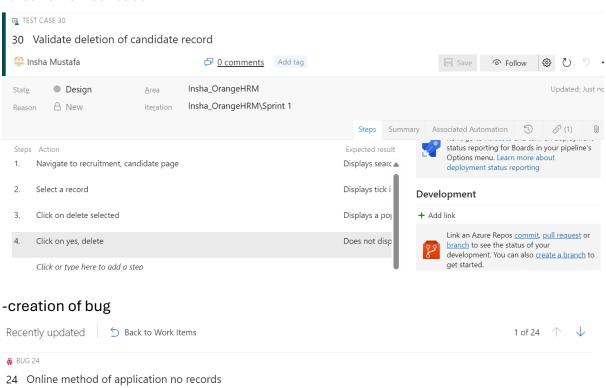
# -creation of user story

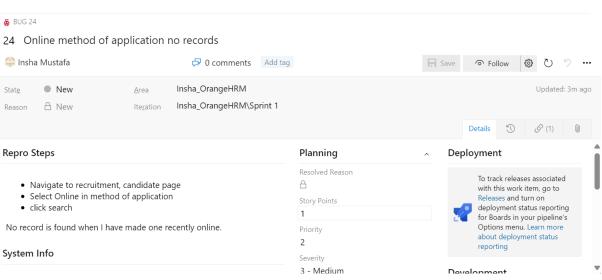


#### -creation of tasks

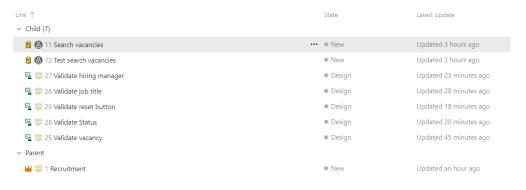


# -creation of test case



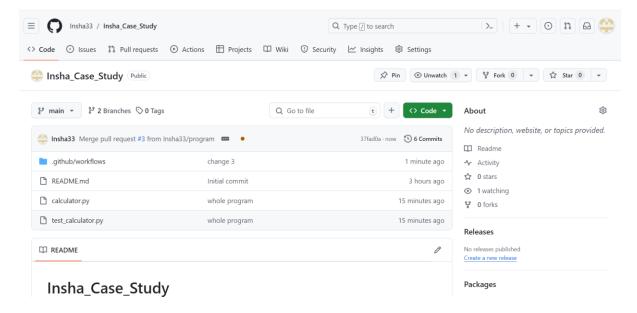


#### -links

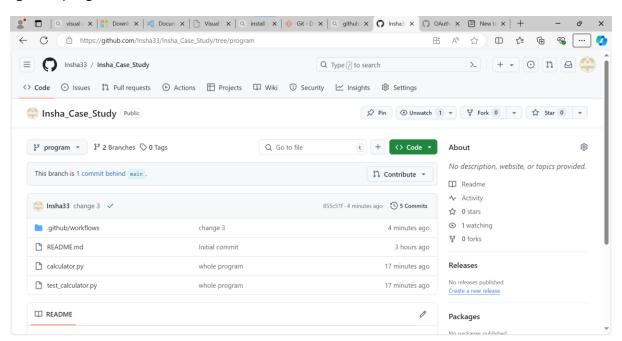


#### • Github

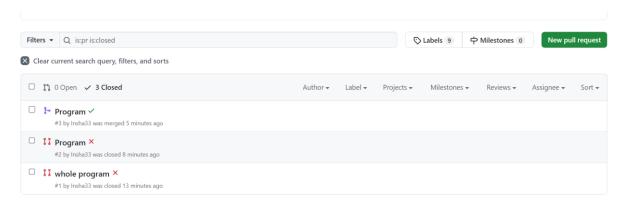
## -github main branch



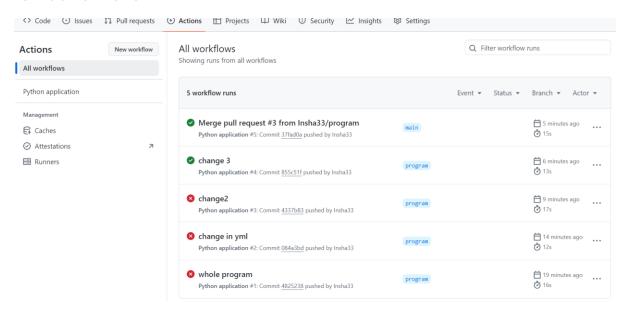
### -github program branch



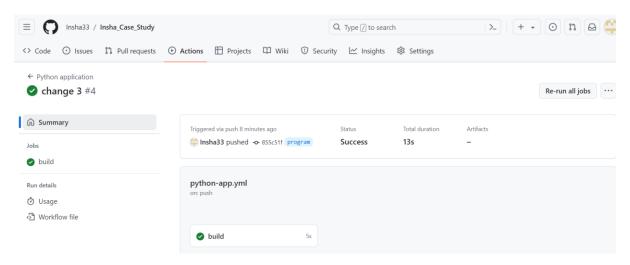
## -pull requests



#### -Github workflows



## -Github action



## -python program

## -python unit test

```
test_calculator.py
      import unittest
      from calculator import add, subtract, multiply, divide
      class TestCalculator(unittest.TestCase):
          def test_add(self):
             self.assertEqual(add(2, 3), 5)
              self.assertEqual(add(-1, 1), 0)
              self.assertEqual(add(-1, -1), -2)
          def test_subtract(self):
             self.assertEqual(subtract(10, 5), 5)
              self.assertEqual(subtract(-1, 1), -2)
              self.assertEqual(subtract(-1, -1), 0)
         def test_multiply(self):
              self.assertEqual(multiply(3, 7), 21)
              self.assertEqual(multiply(-1, 1), -1)
             self.assertEqual(multiply(-1, -1), 1)
          def test_divide(self):
              self.assertEqual(divide(10, 2), 5)
              self.assertEqual(divide(-1, 1), -1)
              self.assertEqual(divide(-1, -1), 1)
              with self.assertRaises(ValueError):
                 divide(10, 0)
      if __name__ == '__main__':
         unittest.main()
30
                                                                                    Ln 30, Col 1 Spaces: 4 UTF-8 CRLF
```

# -yml file

```
calculator.py
                                                                                 test_calculator.py
                                                                                                            ! python-app.yml ×
                        다 타 간 회 .github > workflows > ! python-app.yml 1 name: Python application
✓ INSHA CASE STUDY

✓ .github\workflows

 ! python-app.yml
calculator.py
(i) README.md
test calculator.pv
                                                       uses: actions/checkout@v3
                                                      - name: Set up Node.js
uses: actions/setup-node@v3
                                                       - name: Set up Python
uses: actions/setup-python@v4
                                                        python -m pip install --upgrade pip
OUTLINE
> TIMELINE
```

## -build details

