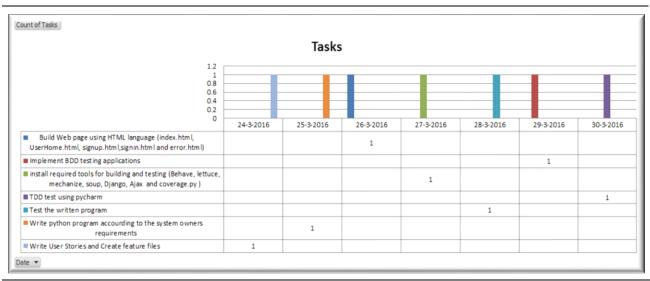
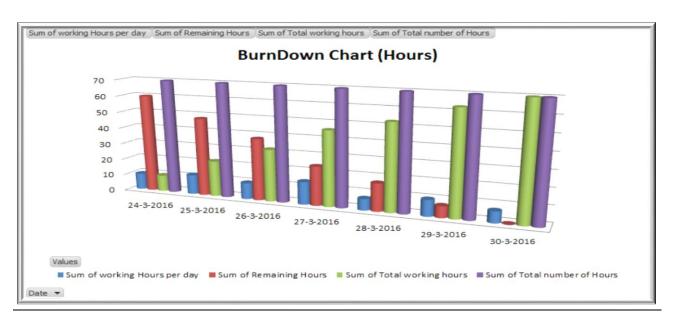
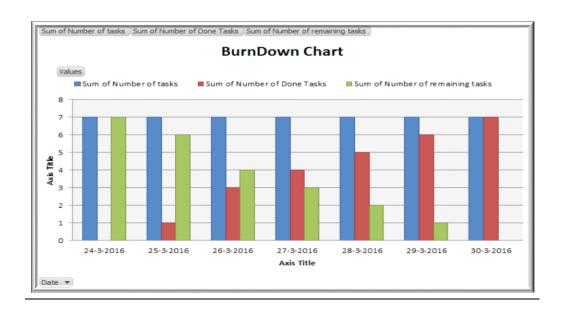
BlueGarden Project

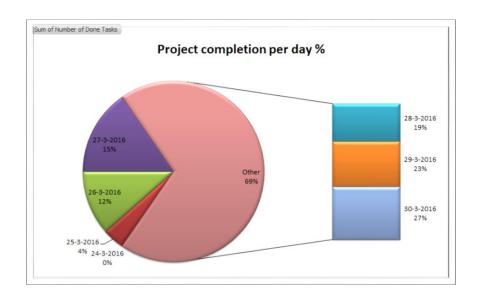
Sprint 1 (Backlog and Statistics):

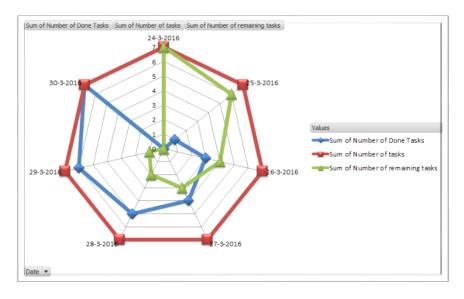
Product Backlog Item	Task	Team	Status
As an executive, I want users to be able to sign up, so	Task 1	Mohammed	Closed
that the system can save necessary to identify and	Task 2	Mohammed	Closed
verify individual user.			
	Task 3	Mohammed	Closed
As a System owner, I want users to be able to login so	Task 1	Mohammed	Closed
that the system can qualify users and that the system	Task 2	Mohammed	Closed
personlises its services for each user.	Task 3	Mohammed	Closed
personlises its services for each user.			
	Task 4	Mohammed	Closed











Current Date		Wed	Wednesday, March 30, 201	6	
Sprint Start Date		Fri	Friday, March 25,2016		
		Sprint T	racking Statistics		
Productive Hours =	70		Sprint Days = 7		
			Scrum Team	%age of time on Project	Assigned Hours
Total Remaining Hours:	0		Mohammed Waleed	100%	⇒ 10
Total Capacity in Hours:	70		Mohammed Waleed	100%	☆ 12
Variance in Hours:	(70)		Mohammed Waleed	100%	1 0
			Mohammed Waleed	100%	☆ 14
			Mohammed Waleed	100%	7
			Mohammed Waleed	100%	1 0
			Mohammed Waleed	100%	7

Write the users story using Gherkin format:

User story 1:

User story 2:

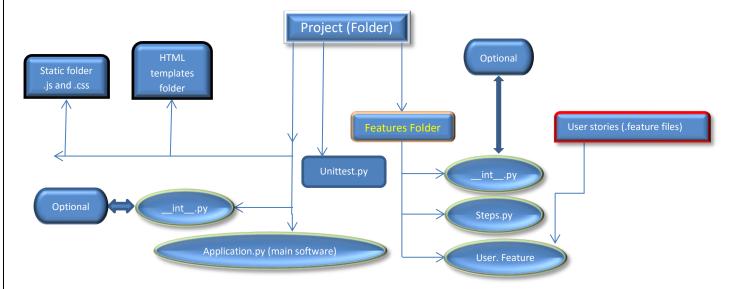
```
# Created by Mohamed 86 at 3/27/2016
Feature: As an executive, I want users to be able to sign up,
       so that the system can save necessary to identify and verify individual user.
 Scenario Outline: user already exist
   Given at the Sign-Up page
   When the <username> or <email> is already exist. it does not matter if <password> is exist or not.
   Then the system should return "Fail" as the registration status of the user
    | username | email
    | mohamed | mohamed@gmail.com | 123456
    Scenario Outline: new user
   Given at the Sign-Up page
   Then the system should return "Success" as the registration status of the user
  Examples:
    | username | email | password | | mike | mike@gmail.com | 123456 |
                             123456
   ray
              | ray@yahoo.com
```

Write the program to fulfill the system owner needs.

- A- Python programming language to implement main feature of the system (Sign-In, Sign-Up). (.py files)
- B- HTML language to create: Home, Login and Sign-up web pages.(.html files)
- C- Flask framework: to make a web based application.
- D- MySQL (database server), create a database and connect it with the Flask
- E- Ajax: is the method of exchanging data with a server, and updating parts of a web page without reloading the entire page (.js file).
- F- Behave, lettuce, mechanize, soup and Django tools for Acceptance test.
- G- Coverge.py
- H- Pycharm code inspection feature for unit test

Prepare BDD (Behavior driven development) files and directories to perform the acceptance test:

<u>BDD</u> puts the user at the center of the tests. It is an increasingly popular method that helps to validate the code from an end-user point of view. Tests are expressed as scenarios (use cases).



- _init_.py: mark directory as a Python package.
- steps.py: The Python code which is executed by the .feature files.
- User. Feature: The behavior test which describes the functionality of the user endpoint in our application.
- application.py: The entry point where our Flask application is created and the server started.

Initializing the Test Environment

We'll start by initializing the test environment and determining which test browser to use, since we will rely on a Web browser to execute our tests. We should append the following python program in features/environment.py.

Behave tests are made of 2 types of files:

- Feature description: contains the human-readable form of your tests, written as scenarios (user. Feature)
- Test script: contains the machine-executable form of your tests, written in Python (steps.py)

We have to write a test program to check the functionality of our application depending on the user story. Save the tests files as Steps.py and run the tests file using behave_django. Get the behave report analyze it to check the application functionality.

Test Driven development (TDD): This is the process of building integrated tests into all the code that you create, and running those tests every time you do a build. It's as if you are extending the compiler, telling it more about what your program is supposed to do. That way, the build process can check for more than just syntax errors, since you teach it how to check for semantic errors as well.

Coverage.py: Coverage.py is a tool for measuring code coverage of Python programs. It monitors your program, noting which parts of the code have been executed, then analyzes the source to identify code that could have been executed but was not. Coverage measurement is typically used to gauge the Effectiveness of tests. It can show which parts of your code are being exercised by tests, and which are not.

TDD test & coverage:

```
C:\Users\Mohamed_86\Desktop\last\main>python coverage run signup_test.py
...

Ran 3 tests in 0.124s

OK

C:\Users\Mohamed_86\Desktop\last\main>python coverage report -m

Name Stmts Miss Cover Missing

main.py 53 28 47% 11, 14-17, 21, 25, 29, 33, 38, 42, 46, 50, 54, 58-65, 73-82, 84

signup_test.py 19 0 100%

TOTAL 72 28 61%
```

Coverage report: 61%

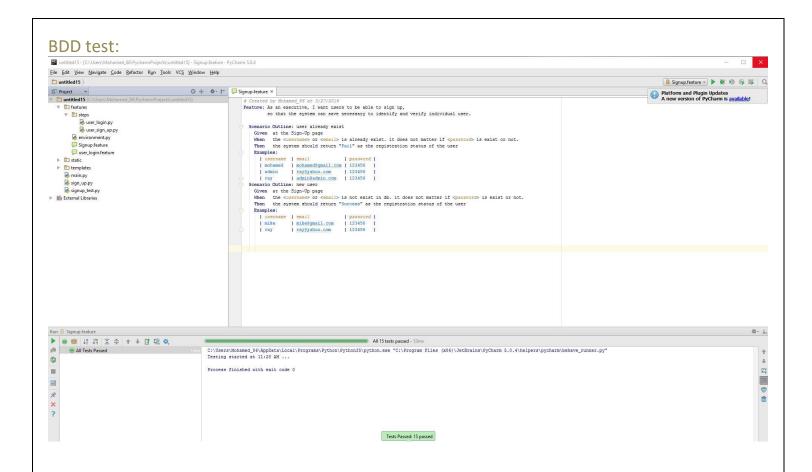
Module	statements	missing	excluded	coverage
main.py	53	28	0	47%
signup_test.py	19	0	o	100%
Total	72	28	0	61%

coverage.py v4.0.3, created at 2016-04-10 11:14

Coverage for **signup_test.py**: 100% 19 statements 19 run 0 missing 0 excluded

```
import main
 2 import unittest
 5 class UserSignupTestCase(unittest.TestCase):
           def setUp(self):
                main.app.config['TESTING'] = True
                 self.app = main.app.test_client()
          def signUp(self, inputName, inputEmail):
    return self.app.post('/signUp', data=dict(
        inputName = inputName,
        inputEmail = inputEmail
               ),follow_redirects=True)
16
17
18
19
          def test_signUp_ok(self):
                rv = self.signUp("ray", "ray@gmail.com")
assert b'success'
         def test_signUp_not_ok(self):
    rv = self.signUp("admin", "admin@admin.com")
    assert b'fail'
22
23
24
          def test_signUp_not_okl(self):
    rv = self.signUp("ray", "admin@admin.com")
    assert b'fail'
25
26
           unittest.main()
```

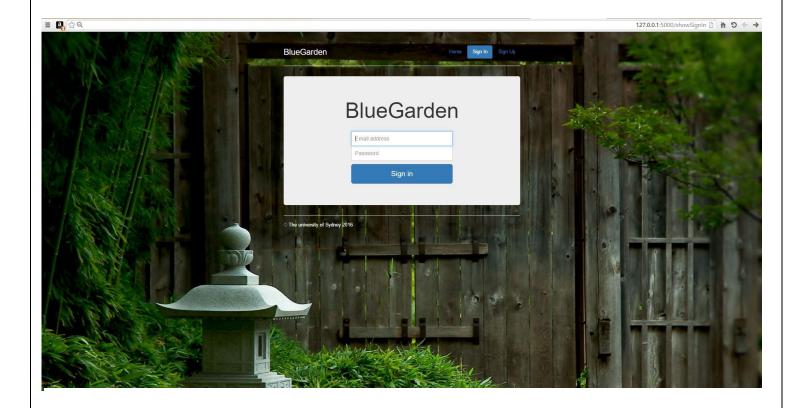
« index coverage.py v4.0.3, created at 2016-04-10 11:14



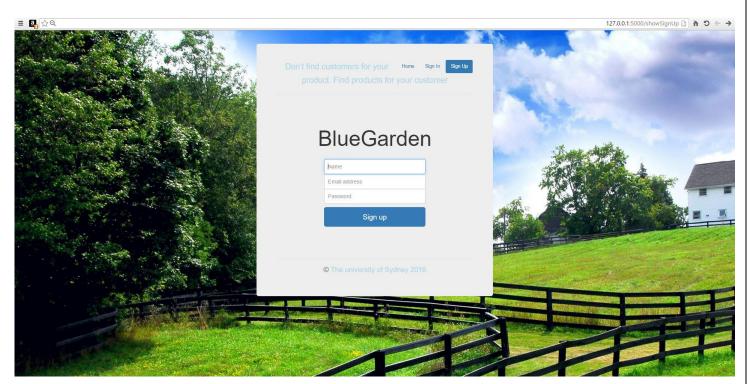
Software output:Home page:



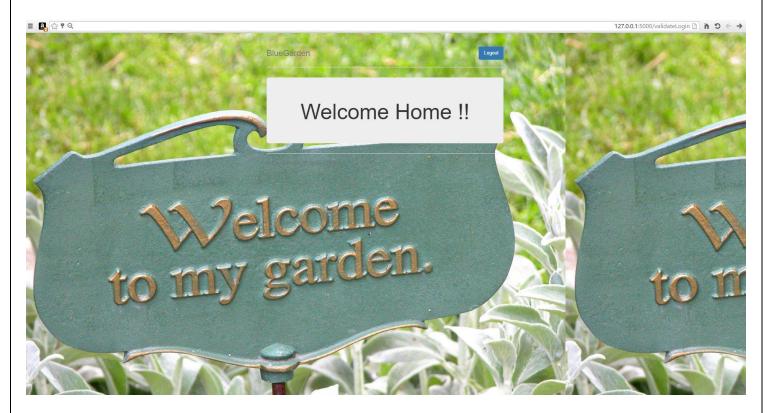
Sign in:



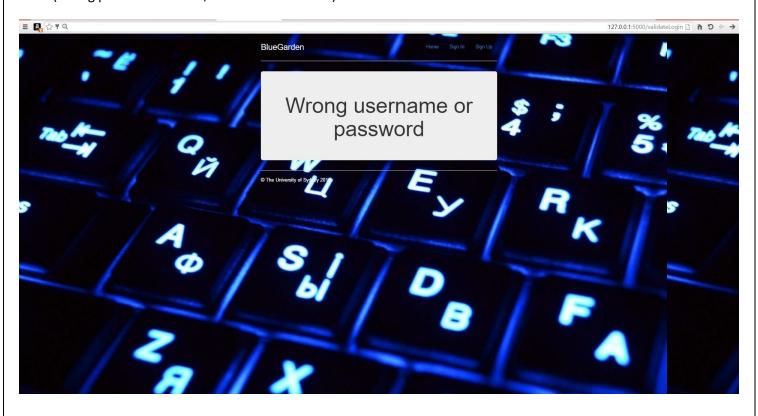
Sign up:



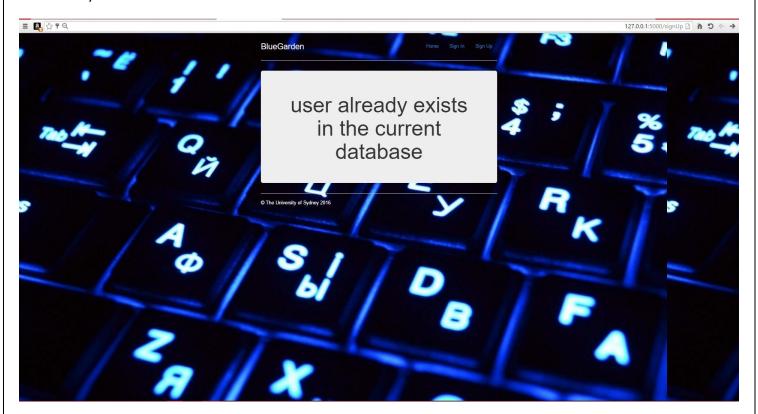
User Home



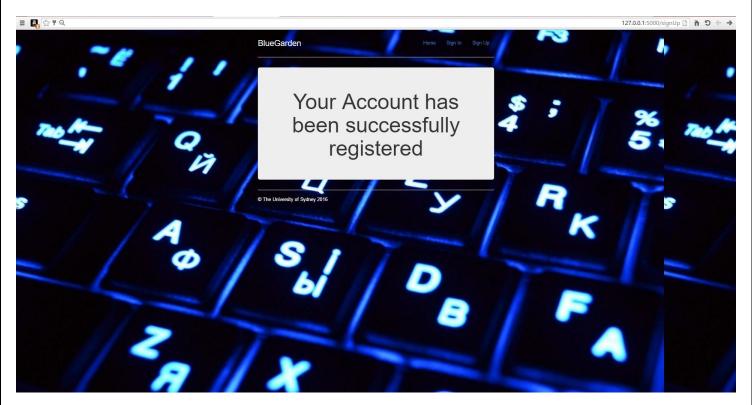
Error (wrong pass or username, unauthorized access):



User already exists:



The system registers the user successfully:



Video page:



GIT Statistics:

