

# Testing Report

Unit testing and Integration testing code coverage: 60%, if exclude route function, it is 90%, so we estimate the actual coverage rate is about 80%.

## Coverage report: 59%

<i>Module</i>	<i>statements</i>	<i>missing</i>	<i>excluded</i>	<i>coverage</i>
controller.py	557	510	0	8%
model.py	437	40	0	91%
run.py	9	6	0	33%
sql.py	469	45	0	90%
<b>Total</b>	<b>1472</b>	<b>601</b>	<b>0</b>	<b>59%</b>

## Coverage report: 90%

<i>Module</i>	<i>statements</i>	<i>missing</i>	<i>excluded</i>	<i>coverage</i>
model.py	437	40	0	91%
run.py	9	6	0	33%
sql.py	469	45	0	90%
<b>Total</b>	<b>915</b>	<b>91</b>	<b>0</b>	<b>90%</b>

*coverage.py v6.1.1, created at 2021-11-08 16:27 +1300*

Acceptance testing: all acceptance tests were conducted and the result shows almost all user stories are implemented and satisfied.

Usability testing: three participants attempted to complete some tasks, all of them completed most of the tasks and we received some feedback which is helpful for us while improving the design.

Here are those tasks:

Leader side tasks:

1. Register a leader account
2. Login as a leader
3. Edit your age in your profile
4. Apply for a coach

5. Check the result of the assessment you did during the coach application
6. Add a goal for yourself and make some progress on it
7. Send message to your coach
8. Pick a time to meet with your coach
9. Check what is your coming meetings(sessions)
10. Provide a simple impression(good/bad) to your coach
11. Send some feedback to your coach
12. Explore more information about the website or evidence-based coaching
13. Start zoom meeting with your coach
14. Log out

Coach Side tasks:

1. Apply to be a coach
2. Login as coach(username: testcoach,password: testcoach)
3. Check your leader's goal
4. Send your leader a message
5. Provide your available time to your leaders on schedule
6. Check what is your coming meetings(sessions)
7. Check your leader's feedback to you
8. Start zoom meeting with your leader

LightHouse Accessibility Score:

	Before	After
<b>Login</b>	<b>85</b>	<b>95</b>
<b>Registration</b>	<b>87</b>	<b>95</b>
<b>ForgotPassword</b>	<b>85</b>	<b>95</b>
<b>LandingPage</b>	<b>64</b>	<b>91</b>
<b>Profile</b>	<b>59</b>	<b>100</b>
<b>MainPage</b>	<b>66</b>	<b>78</b>
<b>Admin</b>	<b>87</b>	<b>95</b>
<b>Feedback</b>	<b>84</b>	<b>96</b>
<b>Assessment</b>	<b>79</b>	<b>93</b>
<b>CoachApplication</b>	<b>87</b>	<b>95</b>
<b>FindCoach</b>	<b>77</b>	<b>100</b>

<b>Ave. Mark</b>	<b>78.18</b>	<b>93.91</b>
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\*This table demonstrate the lighthouse accessibility score before and after we made an improvement

Virtual User testing:

	<b>Admin</b>	<b>Normal</b>
<b>Login</b>	<b>Success</b>	<b>Success</b>
<b>Register</b>	-	<b>Success</b>
<b>Side_Bar</b>	<b>Success</b>	-
<b>MainPage</b>	-	<b>Success</b>
<b>YourCoach</b>	-	<b>Success</b>
<b>Feedback</b>	-	<b>Success</b>
<b>Profile</b>	-	<b>Success</b>
<b>Assessment</b>	-	<b>Success</b>
<b>ForgotPassword</b>	-	<b>Success</b>

\*"- " means the admin or normal site doesn't contain this page or feature

### Security Testing

We performed different simulated attacking methods to attack our website. Which including:

- SQL Injection
- Xss attack

And by using the SQLite and python Flask external packages, we can defend these simple attacks and secure our website.