

SOFT3888_M17_02_Group3

CP5 - Developing a website for a digital coaching platform to improve mental health and mitigate workplace-related psychological stress.

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Client: Saket Kuberi

Tutor: Dhruvil Shah



Overview of the overall project

Stakeholders

- 1 Leaders
- 2 Coaches
- 3 Saket Kuberi (Client)

goals

- Help emerging leaders, who are undergoing workplace-related psychological stress.
- Improve resilience, and psychological well-being.



Brief

Summary

Key activities:

All the user stories that have not been covered in the first client demo

The changes we have made after the last week's client meeting

Summary of testing methods

format of deployment

DEMO



Discipline Knowledge

Software Development

- Flask – Jinja template engine and the Werkzeug WSGI toolkit
- MVC model – Separate internal representations of information
- HTML, CSS, JavaScript – Front-end implementation
- Sqlite3 – database, triggers
- Tencent LightHouse server – Deployment(43.129.230.213)

- hashlib – encrypt the password

Testing

- LightHouse – Usability of page
- Think Aloud – usability
- Unit test
- Selenium – Virtual user testing tool
- Security testing – XSS, SQL injection



Discipline Knowledge

Computational Data Science

Other Techniques

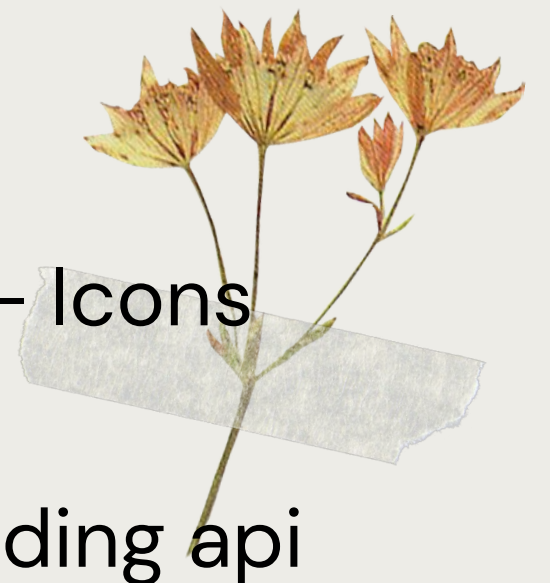
Clustering

unsupervised learning to implement AI matching System between Leaders and Coaches

Model

- Categorical Data: Set the various distances for different criteria
- Manhattan distance

- EditorX– Webpage Design
- Coverage.py – coverage of unit test
- JWT token – authentication
- Zoom API
- jQuery, font-awesome – Icons
- formspree – E-mail sending api



Quality of whole work

Overall

Testing strategy

- unit testing
- ↓
- integration testing
- ↓
- acceptance testing

Virtual user

- testing the UI on website
- testing the functionalities on website

Usability test

- Think aloud
- Lighthouse report

Security Testing

- Performing simulating attacks(including SQL injection, XSS)
- Improve system by attack

Coverage
rate:
60%

Testing Report

Summary

Unit Testing & Integration testing:

Test coverage reach about 80%, almost all function are tested.

Usability testing:

3 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.

Acceptance testing:

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



Testing Report

Summary

Virtual User:

Every testing for admin site and normal user site has successfully executed and have no bugs

LightHouse Report:

Improved accessibility score from 78.18 to 93.91

Security Testing:

We simulate different attacking method to attack. Our website is secured.



Q&A



Thank you!

