Master Team Project WiSe 2021

Fuldemy – Your learning help

Team 02 - Milestone 4

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Team - Local

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1. Product Summary

- **♦** Login
- ❖ Sign-up
- **❖** Navigation bar
- Searching tutor
- **❖** Filtering tutors
- Displaying tutor based on review
- Display/update own details
- Chat
- **❖** Admin page
- Connecting tutors and students based on skill
- Display tutor details
- **❖** Time table
- Filtering
- * Review, rating and feedback
- **❖** Footer
- Chatbot for FAQs unique feature

2. Usability Test Plan

This section describes a test plan for conducting a usability test during the development of "Fuldemy – Your Learning Help" projects. The goal is to include the establishment of a baseline of user performance and validating user performance measures and identifying potential design concerns to be addressed for improving the user satisfaction, efficiency, and productivity.

Test objectives

The objective of this testing is to get the user feedback and experience about searching a specific tutor using keywords, subject filter, and rating of the tutor.

Test background and setup

• System setup

To setting up "Fuldemy – Your Learning Help" we used the following technologies

• Operating System: CentOS

• Database: SQLite3

• Web Server: Django

• Server-Side Language: Python

• Starting point

Users of "Fuldemy – Your Learning Help" website can use their laptops, smartphones or tablets and will focus on the search functionality in the home page.

• The intended users

The test will be conducted with the students and tutors of Fulda University Applied Sciences. We will ask the users of the university to test the website.

• URL of the system to be tested

The link of the "Fuldemy – Your Learning Help" may change due to deployment.

• What is to be measured

Our main goal is to achieve user satisfaction.

Usability Testing Phase:

Test Participant 1:

Phase 1: Screening and Pretest:

Q1. How old are you?

Answer: 25

Q2. What is the highest level of education you have completed?

Answer: Bachelor's Degree.

Q3. What is your current occupation?

Answer: Student (Pursuing Masters in Global Software Development).

Q4. On a scale of 1 to 5 how would you rate your level of confidence in using your laptop/pc for looking for a tutor online?

Answer: 5

Q5. When was the last time you looked for a tutoring service online?

Answer: 2021

Phase: 2 Usability Task description

Task 1: Imagine that you are facing difficulty in studying Machine Learning and want to get help from an expert?

Answer: Yes.

Task 2: Imagine that your exams are near and facing difficulty in solving exercises of Big Data, do you want to get help from an expert?

Answer: Yes.

Task 3: Imagine you are looking for a tutor in "Fuldemy – Your Learning Help", would you search for the feedback from other students?

Answer: Yes.

Phase: 3 Post Test Questions

Q1. How was your overall experience when searching for a tutor?

Answer: Good.

Q2. How was your experience looking for tutor qualifications and feedback?

Answer: Simple and clear.

Q3. Can you tell me what you think about filtering the tutor by subject name and level?

Answer: I tried 2/3 times and for me it worked properly.

Q4. How simple and clean was the interface?

Answer: It is very simple.

Test Participant 2:

Phase 1: Screening and Pretest:

Q1. How old are you?

Anwer: 21

Q2. What is the highest level of education you've completed?

Answer: College.

Q3. What is your current occupation?

Answer: Student (Pursuing bachelor's in computer science)

Q4. On a scale of 1 to 5 how would you rate your level of confidence in using your laptop/pc for looking for a tutor online?

Answer: 5

Q5. When was the last time you looked for a tutoring service online?

Answer: In 2021

Phase: 2 Usability Task description

Task 1: Imagine that you are facing difficulty in studying Programming paradigms and want to get help from an expert.

Answer: Yes.

Task 2: Imagine that your exams are near and facing difficulty in solving exercises of Mathematics. Do you want to get help from an expert?

Answer: Not sure.

Task 3: Imagine you are looking for a tutor in "Fuldemy – Your Learning Help", would you search for the feedback from other students?

Answer: Yes.

Phase: 3 Post Test Questions

Q1. How was your overall experience when searching for a tutor?

Answer: Good.

Q2. How was your experience looking for tutor qualifications and feedback?

Answer: Clearly mentioned.

Q3. Can you tell me what you think about filtering the tutor by subject name and level?

Answer: Filters are clear and easy to use.

Q4. How simple and clean was the interface?

Answer: It is very simple and easy to use.

Test Participant 3:

Phase 1: Screening and Pretest:

Q1. How old are you?

Answer: 22

Q2. What is the highest level of education you've completed?

Answer: College.

Q3. What is your current occupation?

Answer: Student (Pursuing bachelor's in international business & Management).

Q4. On a scale of 1 to 5 how would you rate your level of confidence in using your laptop/pc for looking for a tutor online?

Answer: 4

Q5. When was the last time you looked for a tutoring service online?

Answer: 2021

Phase: 2 Usability Task description

Task 1: Imagine that you are facing difficulty in studying Introduction to Business Law and want to get help from an expert.

Answer: Yes (maybe be a group discussion with friends).

Task 2: Imagine that your exams are near and facing difficulty in solving exercises of economics.

Answer: Yes.

Task 3: Imagine you are looking for a tutor in "Fuldemy – Your Learning Help", would you search for the feedback from other students?

Answer: Yes.

Phase: 3 Post Test Questions

Q1. How was your overall experience when searching for a tutor?

Answer: Great and amazing.

Q2. How simple and clean was the interface?

Answer: Interface is very easy to use, and I did not face any issue adjusting to the interface.

Q3. Can you tell me what you think about filtering the tutor by subject name and level?

Answer: Filters are clear and easy to use.

Q4. How was your experience looking for tutor qualifications and feedback?

Answer: Clearly mentioned.

3. QA Test Plan

Test Objective:

The test objectives are to verify the functionality of website "Fuldemy – Your Learning Help" and to ensure that the software achieves all the requirements by identifying all the bugs and fixing them before release.

Hardware and Software setup:

Desktop, laptop, smartphone, and tabs using Google Chrome, Firefox, Safari, and Microsoft Edge web browser.

Feature to be tested:

- Search by Subject Name
- Search by Tutor Name
- ❖ Filter Tutor by rating

Test Case Id & Browser	Test Title	Test Description	Test Input	Expected Result	Test Result
TC_1 (Chrome, Firefox, Safari, Edge)	View all tutors	Students can see all the available tutors list.	Login with valid credentials. Students will be navigated to the Search Page	The Search Page displays all available tutors.	PASS
TC_2 (Chrome, Firefox, Safari, Edge)	Search Tutors by subject name	Students can search tutors by subject name.	Input "Math101" on search bar and click on the search button	Students can see all approved tutors who teach the	PASS

				"Math101" subject.	
TC_3 (Chrome, Firefox, Safari, Edge)	Search by tutor name	Student can search tutors by using tutors name	Input tutors first name or last name in the search bar and click the search button to search the tutor	Students can see their desired tutor based on their search	PASS
TC_4 (Chrome, Firefox, Safari, Edge)	Filter Tutors by rating.	Students can filter tutors by the rating.	Select 'rating' in the Filter drop down field	Students can see all the tutors based on rating. most rated tutors are show on the top section	PASS

4. Code Review

Hi Dipesh,

I added the code for admin page and integrated with the backend please review it and let me know your comments. https://github.com/krimuru9336/GDSDFrontEnd/commit/d65849090fcb9737140f6d1330358d5eda9b0152
Thanks.

Mujeeb Rahman

1.

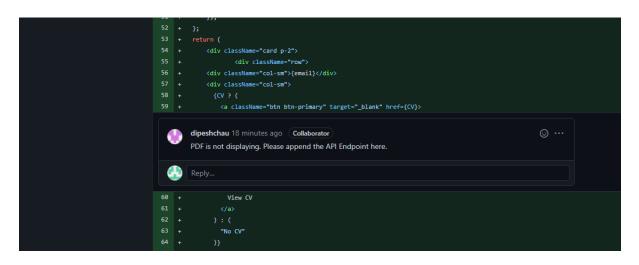
Hi Mujeeb,

I reviewed it and added my comments in it.

 $\frac{https://github.com/krimuru9336/GDSDFrontEnd/commit/d65849090fcb9737140f6d1330358d5eda9b0152}{Thanks}.$

Dipesh Chaudhary

2.



Hi Dipesh,

I have made the changes and checked in the code, please review it and let me know your comments. https://github.com/krimuru9336/GDSDFrontEnd/commit/5802ba5fbe64f8a9712ab7d8fa24372cfc247c5a Thanks,

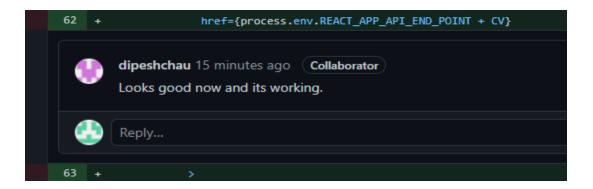
Mujeeb Rahman

3.

Hi Mujeeb, The code looks good now. Thank you.

Regards Dipesh Chaudhary

4.



5. Self Check on best practices for security

Assets	Threats	Explanation
User Details	Accessed by Non-Admins	Used Authentication Classes on each view function, and user details can only be accessed by a person who is a superuser (Admin)
CV	Accessed by Non-Members	Used Authentication Classes on each view function, and CV of tutor can only be accessed by the users who are Signed In
Passwords	Can be accessed on Network Layer if they are not encrypted	Passwords are encrypted while storing in Database
Input Data Validation	Search Bar Malfunction	Tested thoroughly after entering 40 alphanumeric characters.

6. Self-check: Adherence to original Non-functional specs

Requirement Type	Status	Comments	
Availability	Done	Website is available to all the users when the cloud server is running.	
Usability	Done	The website operations are self-explanatory with mentioned comments if required be.	
Performance	Done	The application pages are accessible without any latency from laptop or from mobile	
Expected load	Done	The application's pages are accessible without any latency from laptop or from mobile with higher volume of data.	
Security requirements	Done	Website pages are secured with user authentication. Users with Fulda email are only accessible to the innermost website pages. Users cannot edit other people's info. All passwords are encrypted.	
Fault tolerance	Done	Website works even if one or more modules has exceptions	
Maintainability	Done	The website is cloud hosted and modularized hence it is easier to fix for any incoming issue	
Manageability	Done	Admin can access all part of the application	
Storage	Done	Data is stored in msql sqlite3 database. It is secure and can be modified if required.	

Data can be committed or
rollbacked based on the
need.