

SW Engineering CSC648/848 Fall 2021

Milestone 4

Golden Tutors

12/13/21

Team 02

Team members:

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Shailendra Hamal, Front End Dev
Thomas He, Back End Lead
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Raymond Zuo, Github Master

1) Product Summary

Golden Tutors

Golden Tutors is a website strictly for SFSU students who need extra help in their classes. Golden Tutors make it easy for students to find tutors that are available and ready to help in whatever class they are struggling in. Golden Tutors make it simple for students to reach out to tutors and organize a study session. Golden Tutors also gives the option to sign up as a tutor and help others, with customizable profiles, Golden Tutors make it a personable experience to find the right tutor.

P1 LIST:

- Search function
- Login
- Registration
- Sign up as a tutor
- Message tutor

URL: <http://team2-app-dev-env-he.us-west-1.elasticbeanstalk.com/>

2) Usability test

- Test objectives: Search bar, This is the main function of the website.

- Test background and setup:

The system is set up for any user to be able to look up courses that they may need help with. The search will allow users to find tutors that are teaching those specific classes. The search is designed to make it quick and simple for the users to find help. The search functionality will have filters to be able to specify and pinpoint their searches.

- Usability Task description:

To use the search functionality the user will use the link to access the site. The site is made to simplify users' tasks, where they will be greeted by a search bar and filters immediately asking what courses they need help with. The user can input a class name, course number and use the drop down menu on the side for filters to narrow down results.

- Evaluation of Effectiveness:

To measure the effectiveness of this function is to test one thing which is the accuracy of the search. It will be more effective if the search bar is able to provide everything related to what you are looking for when you first search for it.

- Evaluation of efficiency:

To measure the efficiency of this function is to test the time that it takes for this function to do its job. Time is usually the deciding factor for efficiency. Whether or not you are able to do what you want in a timely manner determines that.

- Evaluation of user satisfaction:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The filters being used for the search were useful	x	x	x	x	x

The results shown by the search bar were accurate	x	x	x	x	x
---	---	---	---	---	---

	Clumsy	Difficult to work with	Very Intuitive
The layout of the sites search bar was positioned correctly and easy to understand	x	x	x

3)QA test plan

Test objectives:

The search feature on the website to be able to find tutors for specific classes

HW and SW setup:

Below is the link to the website's About Page that entails what software has been used for the site:

<http://team2-app-dev-env-he.us-west-1.elasticbeanstalk.com/about>

The server host is Amazon-AWS and the database being used is MySQL

Feature to be tested:

The accuracy of the search results and the speed of the search.

QA Test plan: in table format:

Search Feature Test #1	Description	Test Input	Expected Result	Pass/Fail
Functionality	The search bar should be clearly shown on the site with the filters drop down	Input a computer science class name	The search bar should show the result for that class name	Pass
Security	Not able to search for unrelated content	Searched words that are not classes	The results should only show class names and tutors offering assistance	Pass
Usability	The drop down menu for filters are able to be used accurately	Class filter was selected with a number inputted	With just the number of class and the filter, results should appear for that class	Fail

4)Code Review:

```
home.html x layout.html x
22
23 <!-- nav bar -->
24 <nav class="navbar navbar-expand-lg navbar-dark fw-bold navbar-custom">
25   <div class="container">
26     <a class="navbar-brand" href="/">Golden Tutors</a>
27     <button class="navbar-toggler float-right" type="button" data-toggle="collapse" data-target="#main-nav">
28       <span class="navbar-toggler-icon"></span>
29     </button>
30     <div class="navbar-collapse collapse" style="..." id="main-nav">
31       <ul class="navbar-nav me-auto">
32         <li class="nav-item">
33           <a class="nav-link" href="/">Home</a>
34         </li>
35         <li class="nav-item">
36           <a class="nav-link" href="/about">About</a>
37         </li>
38         <li class="nav-item">
39           <a class="nav-link" href="/browse">Browse</a>
40         </li>
41       </ul>
42
43       <!-- nav search -->
44       <form class="nav navbar-nav">
45         <div class="form-group">
46           <input type="text" class="form-control" placeholder="Find a tutor">
47         </div>
48         <button type="submit" class="input-group-text shadow-none px-3 btn-warning">Search
49       </button>
50
51       <ul class="navbar-nav ms-auto">
52         <li class="nav-item">
53           <a class="nav-link" href="/login">Login</a>
54         </li>
55         <li class="nav-item">
56           <a class="nav-link" href="/register">Sign Up</a>
57         </li>
58       </ul>
59     </div>
60   </div>
61 </nav>
```

To: Raymond Zuo



Hey Raymond,
I went ahead and started fixing the problem we had, where the website did not have a search bar in the nav bar. It may need some styling. Please let me know what you think so far.

-Alberto Ramirez



AR Today at 8:00 PM

I went ahead and emailed you a portion of the code I worked on for you to review it when you get a chance. Thanks

To: Alberto Alexander Ramirez Rodriguez

Hey Alberto, It looks good so far but you should reposition the buttons and the search bar. Also, you still need to try and get the filters to work and add the header to that page of the code.

Thanks,
Raymond

...

Okay, thank you!

Thank you, I will do that.

Ok, will do. Thanks!

☐ Are the suggestions above helpful? [Yes](#) [No](#)

In the screenshots above, the first one was the first email that was sent out from Alberto to Raymond regarding a new feature. The feature that was added was a solution to the feedback the professor gave. The website did not have the search functionality on all pages, just the home page. Alberto added a search bar to the nav bar so that users are able to search from whatever page on the site. Alberto sent a screenshot of the code in the email to help Raymond find where the feature was added. There were also comments within the code that explained the feature. The second screenshot was just a friendly reminder from Alberto to Raymond letting him know that a code review email was on its way. This was sent using Discord to make sure Raymond was receiving the emails, plus it was a friendly way to make sure Raymond was aware of the code review email.

The third and final screenshot is Raymond responding to Alberto letting him know that the code submitted was a good start but there were some spots that could be polished. Raymond also gave him feedback on the code saying headers needed to be added.

5)Self-check on best practices for security:

List major assets you are protecting:

List major threats for each asset above:

For each asset above say how you are protecting it (1-2 lines of text per each):

Confirm that you encrypt PW in the DB:

Confirm Input data validation:

Asset to be protected	Types of possible/expected attacks	Your strategy to mitigate/protect the asset
Tutor Info	Password and personal data leaks.	Restriction to available data. Encryption of things like passwords.
User Info	Password and personal data leaks.	Restriction to available data. Encryption of things like passwords.

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

1. Application shall be developed, tested and deployed using tools and servers approved by Class CTO and as agreed in Milestone 0. Application delivery shall be from chosen cloud Server DONE

2. Application shall be optimized for standard desktop/laptop browsers e.g. must render correctly on the two latest versions of two major browsers DONE

3. All or selected application functions must render well on mobile devices

ISSUE: Some pages on the website have issues when resizing, when on mobile devices some of the messages on the site look like they are extended in a way that is hard to read.

4. Data shall be stored in the database on the team's deployment cloud server DONE

5. No more than 50 concurrent users shall be accessing the application at any time
DONE

6. Privacy of users shall be protected and all privacy policies will be appropriately communicated to the users.

DONE

7. The language used shall be English (no localization needed)

DONE

8. Application shall be very easy to use and intuitive

DONE

9. Application should follow established architecture patterns

DONE

10. Application code and its repository shall be easy to inspect and maintain

DONE

11. Google analytics shall be used

ISSUE: No one on the team has used Google Analytics, but a team member will learn it to test the website on

12. No e-mail clients shall be allowed.

DONE

13. Pay functionality, if any (e.g. paying for goods and services) shall not be implemented nor simulated in UI.

DONE

14. Site security: basic best practices shall be applied (as covered in the class) for main data Items

DONE

15. Application shall be media rich (images, video etc.). Media formats shall be standard as used in the market today

DONE

16. Modern SE processes and practices shall be used as specified in the class, including collaborative and continuous SW development DONE

17. For code development and management, as well as documentation like formal milestones required in the class, each team shall use their own github to be set-up by class instructors and started by each team during Milestone 0

DONE

18. The application UI (WWW and mobile) shall prominently display the following exact text on all pages "SFSU Software Engineering Project CSC 648-848, Fall 2021 For Demonstration Only" at the top of the WWW page. (Important so as to not confuse this with a real application).

ISSUE: The message has not been added to the site but will be implemented under the nav bar on all pages