PRODUCT DESCRIPTION

Project: LFG Forum

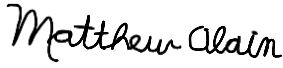|	
Release:	12/6/24
Date:	12/6/24
Product Title:	**LFG Forum**
Authors:	Matthew Alain Jodhveer Atwal Arda Yazici Samuel Iarkov
Client:	INFO 3135 – Section 10
Document Ref:	Product description
Version No:	1.0

1. PRODUCT DESCRIPTION HISTORY

1.1. Revision History

Revision date	Previous revision date	Summary of Changes	Changes marked
12/5/24	--	First issue	--
12/6/24	12/5/24	Updated version number, added additional tools, added finalized website screenshots, added scalable design concept explanation.	

1.2. Approvals
This document requires the following approvals.
Signed approval forms should be filed appropriately in the project filing system.

Name	Signature	Title	Date of Issue	Version
Matthew Alain	*Matthew Alain*	Project Manager	12/6/24	1.0
Cesar Lopez Castellanos		Professor, Project Recipient	12/6/24	1.0

1.3. Distribution
This document has been distributed to:

Name	Title	Date of Issue	Version
Atwal, Jodhveer	Lead Front-End Developer	12/5/24	0.8
Iarkov, Samuel	Lead Back-End Developer	12/5/24	0.8
Yazici, Arda	Communications Officer	12/5/24	0.8
Lopez Castellanos, Cesar	Professor, Project Recipient	12/6/24	1.0

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2. OVERVIEW

2.1. Identifier

INFO3135-Section10-Team1

2.2. Title

LFG Forum

2.3. Purpose

　　The LFG Forum is an online web forum with the intention of allowing freelance video game developers to contact one another and join into teams to complete their ideal projects. This is in response to the highly competitive video game industry currently dominated by large corporate game studios like EA and Ubisoft, leading to many aspiring developers becoming independent (indie) creators. The LFG forum aims to act as a communication hub where these indie creators can create and search for postings requesting certain skillsets they need to complete the development of their games.

　　The forum will be a simple website with a landing page to introduce the purpose and intention for how users can use the forum, with easy-to-understand navigation buttons to allow users to login, create new posts, and search for existing posts that match their skillset. With the understanding that this project was undertaken with a deadline for submission by project stakeholders, some functionalities for strong website practices have been left out of scope for this submission, thus the product can be considered a pilot version, with the expectation that a final version can be worked on beyond this initial deadline.

　　During the development of this product, our team has made frequent comparisons to other, similar platforms for making social connections with others, including websites such as LinkedIn and Reddit. These platforms, however, fulfil a different purpose than the LFG Forum will, allowing it to remain a unique purpose among the competition that will enable an advantage in acquiring a dedicated userbase. LinkedIn is a platform that encourages connecting with as many people as possible to ensure a user has a wide professional network to stay connected with, while the LFG Forum focuses on making temporary, individual connections for the duration of a given game development process, after which the users are not expected to maintain contact with one another unless they choose to. The goal of the LFG Forum is not for users to "friend" or "follow" other users, but to find them, make contact, and work together to accomplish a goal. Reddit, meanwhile, involves a greater focus on users joining individual communities, and create any kind of posts within those communities with the ability for users to affect the visibility of a post by "upvoting" or "downvoting" it. The LFG Forum, however, includes no such functionalities, and will strictly be used to search for users or posts that fulfil a certain desired criterion.

　　Due to the limited scope, the product has only certain functionalities and a small scale and complexity. Because we aspire to expand on the product after initial submission, we have included a description of current out-of-scope improvements that can be made to the forum in the following "Composition" section, including how we intend

to implement these functionalities in the future. For this submission, we have limited the product to the following key user functionalities:
- Access the web page from any network
- Create and log in to an account
- Create and delete postings.
- Filter posts based on user's specified preferences
- Search for posts using specific title keywords

Creating this product required a team with skillsets in backend networking, PHP and HTML development, and CSS formatting. Our networking lead was able to configure a web server to host the website on independent of paid web hosting services, while our lead back-end developer programmed the technical functionality of much of the forum's necessary component in PHP and HTML to fulfil the project's success criteria. Finally, our front-end development team improved upon the back-end code to create a set of intuitive and appealing user-facing web pages, completing the project.

To review and approve the product's specifications, the project recipient must follow the instructions specified in the following "Instructions for use" section to access the website and ensure proper functionality of the agreed criteria, as dictated within the previously approved project charter. Additionally, they must access the attached project delivery units, included in the following "Composition" section. With the collection of provided materials, the product can be reviewed by the project recipient, ultimately to determine whether the product will be approved as per the expected standards of the project specifications.

2.4. Composition

As was specified in the previously approved project charter, the following components are submitted alongside this report:
- Project Charter (Previously approved)
- Functional Website (Accessible at http://216.232.118.207/)
- Website Files and Directory Structure
- Export of current phpMyAdmin database for local testing in case of website failure
- User Feedback Documentation
- Backend Documentation
- Project Presentation (Uploaded separately via KPU Moodle Site)

In addition to the above components, the project team utilized other technical applications and programming tools to complete the work. For programming, we each used our preferred choice of IDE (Notepad++ and Visual Studio Code) and web browser (Firefox) in conjunction with XAMPP running Apache and MySQL for locally testing our individual components of the product. Operating the server required an old server computer configured with a static IP address, PostgreSQL, and Apache and SSH. The server was connected via ethernet to a TP-link switch and a wireless router. The router required port-forwarding to process requests, and used DHCP IP reservation to ensure the server IP was not violated. The server was configured with roles for enhanced security, and for further security, the database was configured with MD5 password authentication. To share files and connect to this central server we used GitBash, which required SSH setup with RSA keys and SSH connection scripts for each team member device who needed to access the content of the server. Finally, our team editing lead

used TeamViewer to access devices when working remotely, and Adobe Premier Pro for editing the final project presentation. For further documentation of the specific details of the server implementation, see the provided backend documentation.

In addition to the above components and utilized tools, the project charter indicated that to the website would be designed with scalability in mind, and to confirm that, the team would provide an example of at least one feature to be implemented in the future alongside an explanation of how this feature will fit into the existing website design. The feature we expect to introduce later in the forum's development is a "favouriting" system to save posts to look at later. Implementing this would be moderately complicated but would still fit in well with our existing website design. This could be implemented by adding another option like the currently existing "delete" button that is displayed on each of the logged-in user's posts. To implement this from a back-end perspective, in addition to adding another field to the post list class, it would likely require setting up another database table to store a list of what post IDs are flagged as "favourited" by each user, that could then be queried in a new database function, or listed in a new filter.

3. USING THE PRODUCT

3.1. How to install your product

Because the LFG Forum is independently hosted, there is no installation needed from the users, it can be accessed in its entirety by visiting the server address at 216.232.118.207. This can be done directly by copying or typing the IP address into any web browser while the user's computer has a working internet connection.

3.2. Security recommendations

Because this website is hosted online, there are no security risks involved with installing the product, but it does include security recommendations that apply to all online web use. Particularly, because the product involves creating user accounts that are linked to a provided email address, there is the inherent risk of potential data breaches that could result in the disclosure of the provided emails and hashed passwords. Similarly, insecure passwords could allow malicious actors to access a user's account, as well as any information stored within it. To mitigate these potential risks, it is encouraged for users to use secure passwords that cannot be guessed or brute-forced by hacking algorithms. In a more official release of this product, we could introduce multi-factor authentication and additional password requirements to reduce the likelihood of unauthorized users gaining access to other accounts.
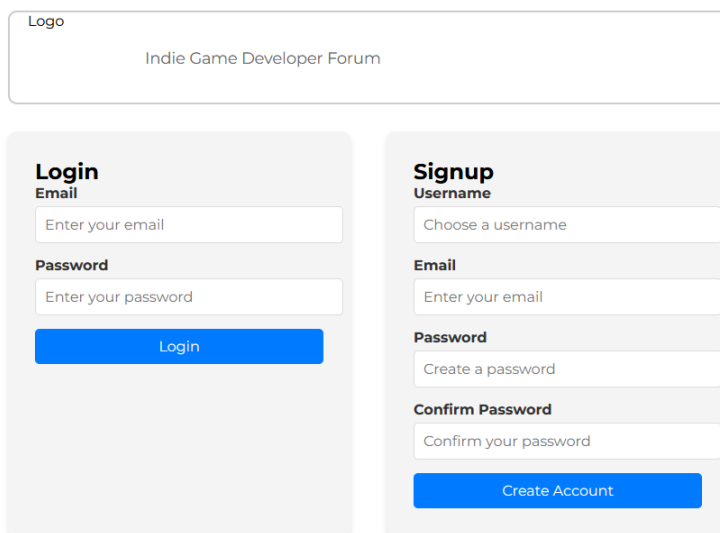
3.3. Instructions for use

1. To access the LFG Forum, users must open their preferred web browser and navigate to 216.232.118.207 by typing it into the address bar. Afterwards, they will be directed to the home page of the forum.
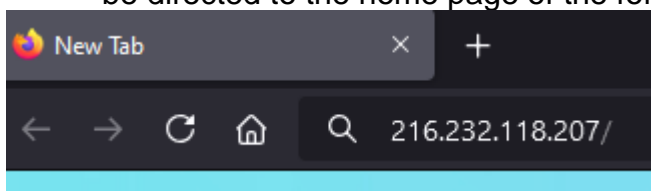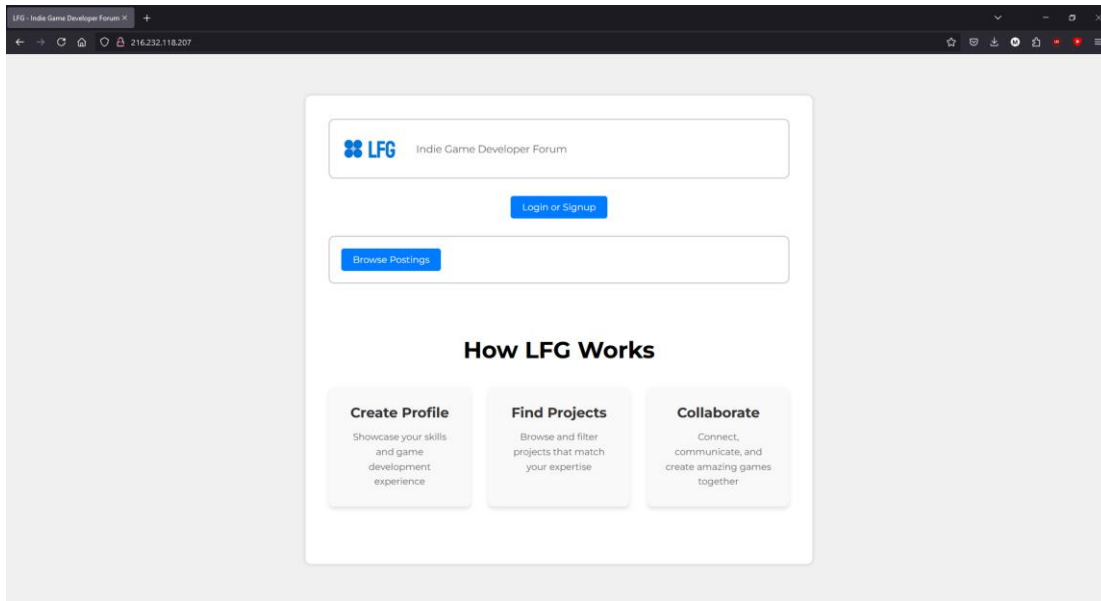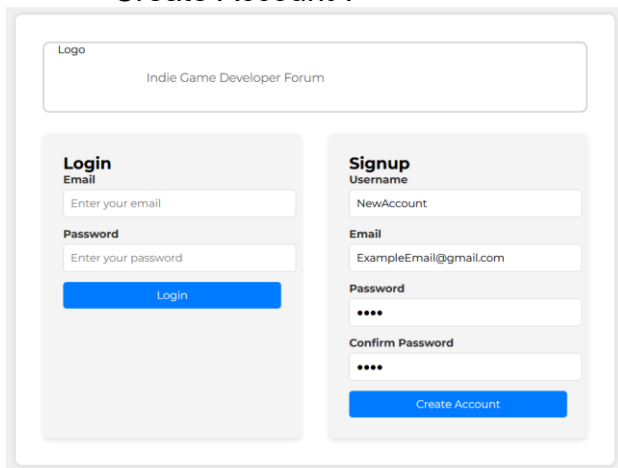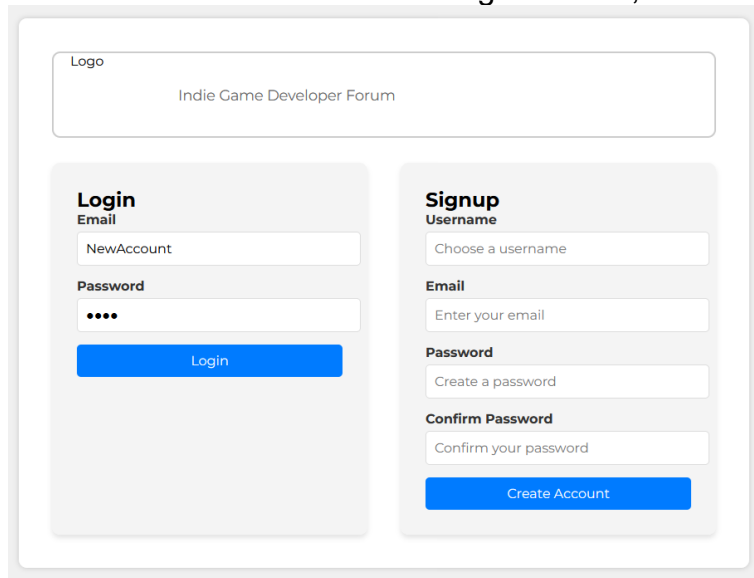
2. Click the "Login or Signup" button to go to the account creation page.

3. Create an account with a valid email address and a secure password, then click "Create Account".

4. Once the account is created successfully, return to the login page and input the same credentials in the Login section, then click the "Login" button.

5. When logged in, the home page now presents the options to log out or view the user's profile by clicking on the "My Account" button.

Welcome, NewAccount!

Logout   My Account

Username: NewAccount
Email: ExampleEmail@gmail.com
Bio:

How LFG Works

Create Profile

Showcase your skills and game development experience

Find Projects

Browse and filter projects that match your expertise

Collaborate

Connect, communicate, and create amazing games together

6. The user profile will show the user's selected preferences and information (currently not implemented). Users will also see the "View Posts" button to navigate to the post listings page.

NewAccount's Profile

Email
ExampleEmail@gmail.com
Bio

Roles
No roles assigned

Welcome, NewAccount

View Posts

Logout

7. By default, the postings page should show posts for the user's selected role. These shown posts can then be updated using the filters located in the sidebar.

Welcome, NewAccount

My Profile

Logout

Filters

Post Types
All Posts
Programmer
Artist
Tester
UX / UI
3D Modeller
Audio Engineer
Networking Engineer
Narrative Designer

Post Title   Search

Programmer Postings

Looking for Programmer!
Posted by: matt
Contact:
matthew.alain@student.kpu.ca
Role: Programmer
Experience: 2 years
Post closes 2024-12-09 (Closes in 3 days)

I am looking for a programmer to help me code my new game! It will be an open-world FPS MMO, with inspiration from games like WoW, Halo, and Final Fantasy!

Welcome, NewAccount

My Profile

Logout

Filters

Post Types
All Posts
Programmer
Artist
Tester
UX / UI
3D Modeller
Audio Engineer
Networking Engineer
Narrative Designer

Create Post

Post Title   Search

All Postings

Looking for Audio Engineer   Delete
Posted by: NewAccount
Contact: NewEmail@gmail.com
Role: Audio Engineer
Experience: 2 years
Post closes 2024-12-31 (Closes in 25 days)

I am looking for an audio engineer!

Can Someone Make My Game Sound Good?
Posted by: EvenNewerUser
Contact: anotherEmail@gmail.com
Role: Audio Engineer
Experience: 10 years
Post closes 2024-12-06 (Closes today!)

I really need someone to help me with my audio mixing for my rhythm game! I'm only looking for professionals who have a lot of experience.

Need help with narrative!
Posted by: NewUser
Contact: Testemail@gmail.com
Role: Narrative Designer
Experience: 0 years
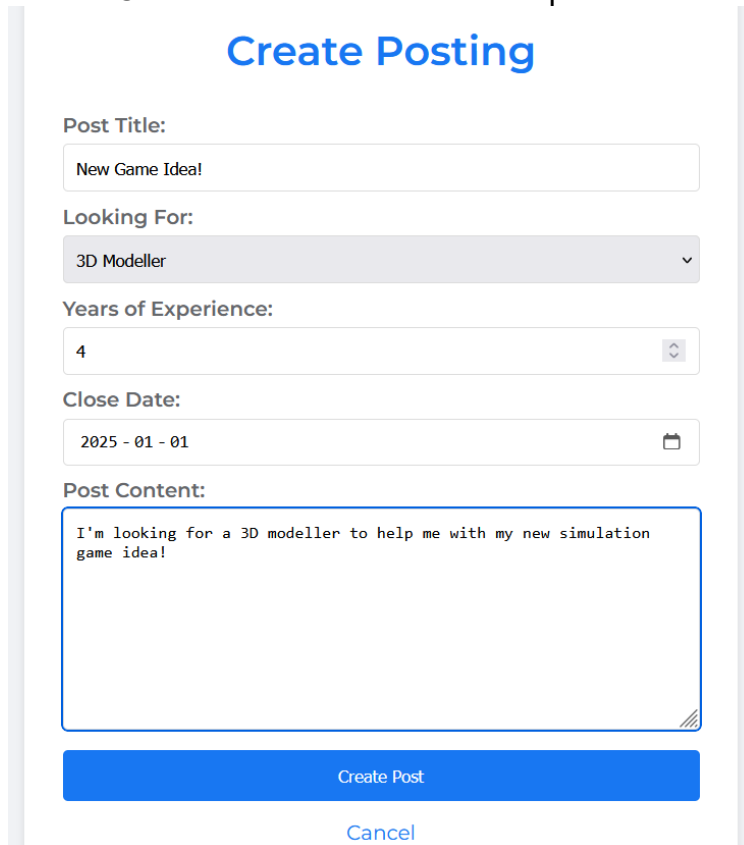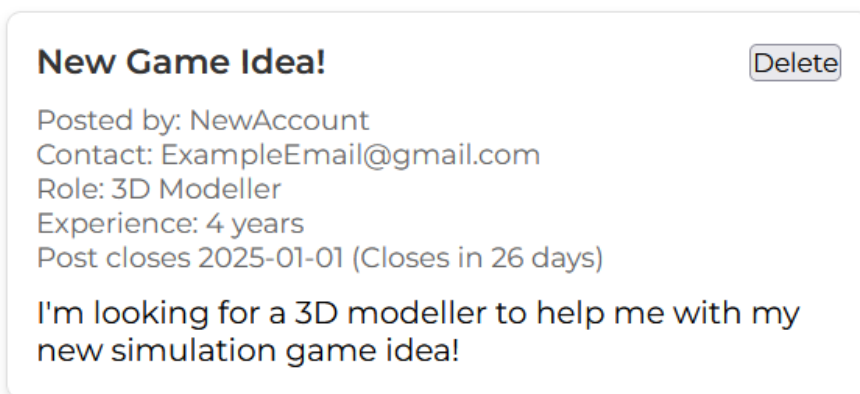Post closes 2024-12-27 (Closes in 21 days)

I am looking for someone to help me write the narrative for my game! I have a few ideas, but I really just want someone to help bounce ideas off of! Looking forward to hearing from you!

Looking for Programmer!
Posted by: matt
Contact:
matthew.alain@student.kpu.ca
Role: Programmer
Experience: 2 years
Post closes 2024-12-09 (Closes in 3 days)

I am looking for a programmer to help me code my new game! It will be an open-world FPS MMO, with

8. By clicking the "Create Post" button below the filters, users can create their own postings, where they will be prompted to input all of the necessary information of what role they are looking to be filled, how experienced of a developer they are looking for, when they want the post to close, and any additional details they want to provide in the content of the posting. Once the information is provided, the user clicks the "Create Post" button, and if the provided information is valid, the post will be added to the database. During this time, users have the option to click the "Cancel" button to return to the post list.
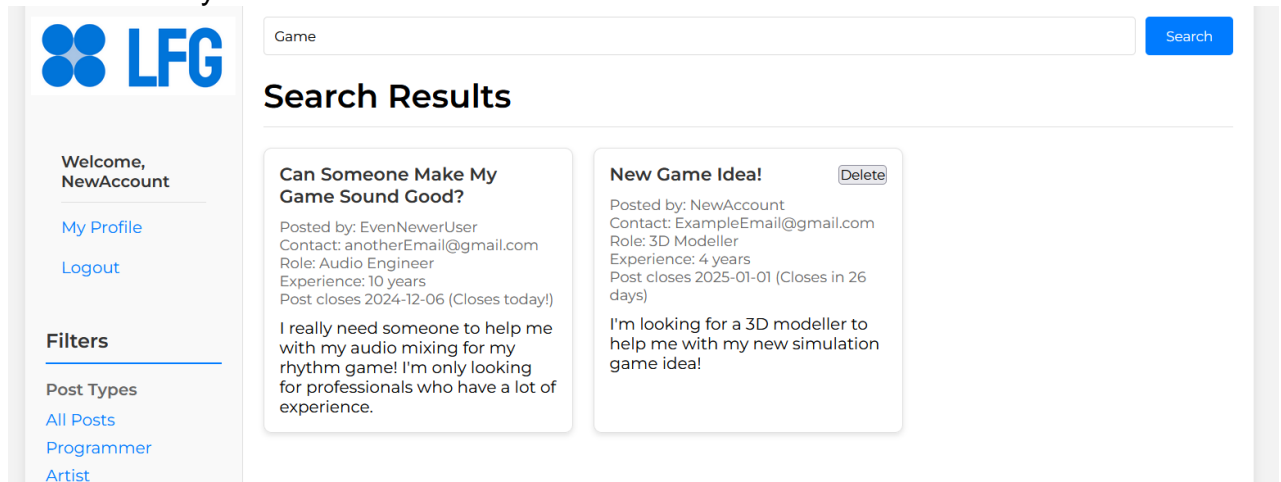
9. By default, after a new post is created, it will bring the user to the listings for the role they requested. There, they can see their new post, as well as the "Delete" button to remove the post early if they wish to.

10. If the user is looking for a specific posting, they can use the search bar to look for a specific keyword in the posting title. By typing the keyword into the search bar and click the "Search" button, the forum will return all postings with titles that contain that keyword.

11. Finally, clicking the "Logout" button will end the user's current session and will return them to the home page, where they must then log in again to continue creating or browsing posts.

12. To leave the website, users can simply close their web browser or navigate to another web page.