CSC 309 - Assignment 4 - Phase 1
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Description

xyz is a independent developer contracting platform for game development where project owners can find resources they lack in their project ranging from programming to music, graphic and sound design, and more. Similarly, individuals can look for contract work that meets their expertise. Since development teams can often lack expertise in every area, some teams will want to find someone who can fulfill their needs quickly and efficiently without finding a permanent team member. At the same time, developers or creators who cannot dedicate their time to being part of a time can find part-time contracting work without being tied down to any specific project.

How it Works

xyz is an online service platform where one can register and then either post jobs as a project representative or make their account available for viewing as a contractor. A project representative signs up and makes a posting detailing their project needs (contractor with expertise in specific areas), project details (including a link to the project website), specifications about the work including quality and style, contact information, and optionally how much the contractor will be paid in total (including negotiable rates). Projects have their own pages, including all of their work postings and details, where anyone can view the project and view its progress. This can include screenshots, videos, demos, and any other relevant material. Contractors will see this page and be able to contact the project owner, show their portfolio, discuss details, and potentially enter into a contracting agreement. Throughout this process, contractors and project owners can privately contact each other. As a contractor, one would sign up with a new account, outline their portfolio with details about their work (development, design, etc.), showing previous credited works, and recommendations from projects who were satisfied with their work. Optionally, a creator can choose not to include this information as long as they have a link to their personal website. At the end of an agreement, contractors and project owners rate each other in various fields such as professionalism, quality of work, etc. These ratings are available for every user to view and will help popular contractors and projects find work with greater ease. So, the process includes: creating a project post or contract profile; looking through relevant projects or contractors, agree on terms, complete the work, and then rate each other.

Challenges

Independent development teams typically struggle to find permanent team members who can fulfill every skillset that a development team needs. At the same time, several individuals who possess this skillset do not or cannot dedicate themselves to being a permanent team member to any given project but would still want to fulfill this work. xyz will match together project teams and individuals who are willing to fulfill contract work for project teams for a period of time and price that is at the discretion of the two parties. xyz will also provide ways for project teams to show off their work, generate interest in their project, and potentially find more high-quality work from the web app.

Feature Requirements

User Authentication: Our website authenticates users with a public identifier (username) and a private identifier (password) as well as two-factor email authentication with a temporary code for login.

User Profiling: Each user has a profile associated with their personal information about projects and/or portfolio. This also includes ratings and review gathered by other users, credited works (projects or portfolio pieces), professional skills (if a contractor), as well as a way to contact each other outside of xyz.

Social Networking: Users are able to follow projects and contractors. Following a projects keeps the user up to date with new material that is posted to the website as well as any new job postings created by the project. Following a contractor keeps the user up to date on any new projects they are working on as well as any changes to their portfolio which can include new skills, etc. We also implement a basic chat system between users.

Rating and Commenting: After working with a contractor or project group, a rating is assigned to both the contractor for their quality of work, allowing others to see this on the contractor's profile page, as well as a rating of the project indicating their professionalism, ease to work with, etc. that anyone can view on their project page. These ratings are then fleshed out into full reviews with a brief description of the work experience.

Search and Recommendation System: Anyone can search for projects that match a certain skillset (including that of the contractor if they are logged in) or contractors that match a given skillset (including that of the project's needs if they are logged in.) On their login screen, a brief listing of recommended contractors or projects that meet the user's skillset or skill requirements will be displayed on entering the website. This is ordered both in how compatible the contractor or project is with the user as well as the contractor or project's rating. This will match the most relevant projects and contractors together.

Admin: The administrator view will include aggregate information about projects and contractors such as total number of projects, contractors, completed job postings, and an array of other useful analytics. This allows includes changing passwords, and overriding user information, entering data directly into the database, as well as other necessary utilities to deal with user-support cases.

Work Distribution

Team members will partner up into pairs. These pairs will then review one another's work continuously throughout development and occasionally review the other pair's work. Pairs will be split into Daniil/Alex and Izzy/Annie. Daniil and Alex will be implementing mainly the back-end of the app, dealing mainly with the database, database-facing code, and front-end facing code on the node.js server. In contract, Izzy and Annie will be creating the necessary front-end facing code, HTML, and CSS styling for the app.