## **CmpE 352/451 Project: Freelancer Platform**

## **Spring 2018**

This main objective of this project is providing an environment for clients and freelancers to collaborate in a single platform. The clients may create their projects and jobs about programming, writing, design, development etc. and post the details on this platform to find an expert on such topics. The freelancers are free to bid on these projects until a certain deadline that is specifically determined by the client. After collecting these bids, the client may agree with one of these freelancers. The agreement includes details such as job completion deadline, total fee to be paid, payment options and so on.

In order to create a trustful environment, the clients and freelancers have ratings and comments on their profile with respect to their behavior. This feature helps clients to have a detailed information about the freelancers, browse past projects that are accomplished and inspect their expert areas. Through such information, the client may analyze the possible candidates and select the most feasible one to collaborate. On the other hand, profile page of the clients may help freelancers to check if the client is trustable about the payment issues.

The clients and freelancers may search the available content within the platform, if they are looking for something specific. In addition to the basic search, this system should support an advanced search mechanism that enables a detailed functionality. The client or freelancer may utilize the advanced search facility to search a content with respect to the creator, creation date, topic, deadline date, difficulty and so on. The user-defined tags of the projects can be helpful to extend the scope of the search mechanism by enabling the semantic search.

As a key functionality, this project also specifies a recommendation mechanism. The developed system shall recommend open projects to the freelancers according to their experiences or interest areas. On the other hand, the recommendation system is also beneficial for the clients. After a project is created, the system may recommend related freelancers by checking the content and specifications of the job, or it may recommend a lower/upper bound of fee for the project by analyzing the similar projects in that area. The utilization of the semantic tags may also improve the quality of the recommendation mechanism by recommending similar projects through "semantically" common tags.

After the freelancer completes the job for the client, the fee is paid and they are free to rate each other or leave a comment. During these processes, a messaging mechanism to provide the communication between freelancers and clients are necessary. This embedded messaging mechanism is important to maintain the communication throughout the project development. The client may ask the recent status of the project, or the freelancer may consult to the client about some details which are not explicitly specified in the project description.

The main system of this project is composed of a web application with necessary API implementations for the front-ends. In addition to the web platform, this project requires

a native Android application that supports the same functionalities that are defined through API calls.

The implementation of this system should follow the standards introduced by the World Wide Web Consortium (W3C) [1]. In addition to the rules defined by the standards body of W3C, any related software standards should be followed. Besides, ethics is an important issue of this project. Most of the contents within this platform are personal, including the project/job description. The personal information, payment processes, contact information, copyrighted projects, license issues and everything related to these paradigms should be respected and considered. Open source software with appropriate use permissions may be used, as long as it is properly attributed and documented.

## References

[1] The World Wide Web Consortium – Standards, Accessed: January 2018.