CEN 4010 Principles of Software Engineering

Fall 2021

Milestone 1 Project Proposal and High-level description

LikU:

Group 7

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# **Executive Summary**

**Competitive Analysis**

## **Analysis Table**

# **Data Definition**

The data definition table contains the name, meaning, and usage for all terms that hold significant value in the context of LikU. The name of a term is how the team refers to the term. The meaning is what the term means or does. Each term can represent a main term definition, a data element, or an application service. The usage column represents which one of these three groups a term is.

|  |  |  |
| --- | --- | --- |
| Name | Meaning | Usage |
| LikU | Name of project that resents the entire web application and the associated web pages. | Main term |
| Web application | Reference to both the back end system and front end visualization for actor interaction | Main term |
| Website | Reference to front end visualization for actor interaction | Main term |
| System | All the data inside the database and the backend of the application | Main term |
| Actor | Any induvial that is using LikU | Main term |
| Guest | An actor that is using the application but is not registered in the system | Main term |
| User | An actor that is using the application and is registered in the system | Main term |
| User name | A displayed representation of a user for both other actors and the system | Data element |
| Password | A string of characters that allows the system to recognize a user | Data element |
| Register | The act of an actor inputting their data into the system for the first time | Application service |
| Log in | The act of an actor successfully inputting their password into the system. Allows user to post, comment, and like | Application service |
| 3-Like-System | Reference to a user’s ability to either first like, second like, and third like any given post | Main term |
| First Like | An action a user can take to indicate that a user enjoyed another users post | Application service |
| Second Like | An action a user can take to follow another user | Application service |
| Third Like | An Action a user can take in order to re-post another user’s post | Application service |
| Upvote | Pushing a post towards the top of the Home Page Activity Hub feed | Application service |
| Post | Refers to both the photo and caption that a user allows their followers, users, or other guests see | Application service |
| Photo | Refers specifically to the image that a user uploads to LikU for other | Data element |
| Caption | Refers specifically to the text that a user can add to a photo | Data element |
| Comment | The opinions other users leave on a post | Application service |
| Discussion | Refers to the conversation that is happening in the comments on a specific user’s post | Main term |
| Trends | A certain type of post that many users are currently enjoying and first liking | Main term |
| Search | The act of an actor looking for a specific user or post | Application service |
| Home Page Activity Hub | A user specific webpage that contains a feed of all the recent posts from their second liked users | Main term |
| Profile Page | The webpage that contains all posts of a user | Main term |
| Follow | An action that allows a user to see another users posts on their feed more frequently | Application service |
| Followers | Refers to the users that have second liked a user before | Main term |
| Database | All the data that the system stores and needs in order to properly function | Data element |

**Use Cases**

# **Non-functional Requirements**

# **High-level System Architecture**

1. **Group 7 Lamp Server:** Our given group LAMP Server, lamp.cse.fau.edu/~cen4010\_fa21\_g07, will be used to host our web application. The lamp server will also give the team access to the necessary PHP and MySQL facilities.

1. **VMware Engineering Virtual Environment:** Due to security measures put in place by FAU, the team will use the provided virtual environment in order to connect to and make changes to the group LAMP server.
2. **WinSCP**: WinSCP is a Secure File Transfer Protocol (SFTP) software. The team shall use WinSCP in order to transfer files to the group LAMP server from our virtual environment. WinSCP will allow the team to create and manage our LAMP server.

1. **MySQL Database:** MySQL is a database management system that allows our team to create, update, and delete our database. Our database will contain all the necessary information/data that our application needs to function. Users will be able to add or update their data through our application.
2. **phpMyAdmin:** phpMyAdmin is an administrative tool to manage our MySQL database. PhpMyAdmin allows the team to manipulate data and manage our database schema in an easier fashion.
3. **GitHub:** The team shall use GitHub in order to allow for better communication and code/file sharing applications. GitHub will allow the team to simultaneously work on the web application. The team will also use GitHub for version control. This means that the team will be able to merge their files with the most updated version of the code or return to earlier version of the web application.
4. **Hyper Text Markup Language (HTML):** HTML is a programing language that allows for web development. The team will use HTML as the building blocks to define webpage structure for the LikU website.
5. **Cascading Style Sheet (CSS):** CSS is a programming language that helps better define how a webpage will look. The team will use CSS to make an aesthetically pleasing webpage that is intuitive to browse.
6. **JavaScript:** JavaScript is a programming language that allows for interactive web pages. The team will use JavaScript to aid in the process of creating an enjoyable user experience.

1. **Hypertext Preprocessor (PHP):** PHP is a programming language that allows for communication between the website and the database. The team will use PHP to communicate and make changes to the database.

1. **Personal Integrated Development Environment (IDE):** An IDE is a software application that makes development easier. An IDE contains an editor for source code, contains suggestions, and a debugger. Every team member will use an IDE of his or her choice.

1. **Bootstrap:** Bootstrap is a framework that contains both CSS and JavaScript that makes front end development easier. The team will use Bootstrap to create better looking webpages easier. License link: https://github.com/twbs/bootstrap/blob/main/LICENSE
2. **Supported Browsers:** The team will take the necessary efforts to ensure that the web application works on Mozilla Firefox, Google Chrome, and Internet Explorer. The team will ensure that any functionality is supported by these web browsers.

# **Team Roles**

**Team Lead and Back End Developer:**

* Gianni Difede

**Scrum Master:**

* Long Ho

**Product Owner:**

* Dukens Louis

**Back End Lead:**

* Luke Schuknecht

**Front End Lead:**

* Peterling Etienne

# **Check List**

Team decided on basic means of communications - Done

Team found a time slot to meet outside of the class - Done

Front and back end team leads chosen - Done

Github master chosen - Done

Team ready and able to use the chosen back and front-end frameworks – On Track

Skills of each team member defined and known to all – Done

Team lead ensured that all team members read the final M1 and agree/understand it before submission – On Track