

Software Engineering and Testing

Assessment 1: Project Proposal

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Declaration

I herby certify that this material, which I now submit for assessment on the programme of study leading to the award of Ordinary Degree in Computing in the Institute of Technology Blanchardstown, is entirely my own work except where otherwise stated.

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"QWERTY" Social Network

Abstract

The QWERTY Social Network is a cutting-edge, user-friendly platform made to encourage deep connections and interaction between users. It makes it easy for users to follow others, like content, comment, and share updates. Real-time discussions, trending topics, and multimedia sharing—including images and videos—will all be supported by the platform. QWERTY seeks to offer an approachable and entertaining setting for communication, idea sharing, and information retention with an emphasis on ease of use and user experience.

Introduction

The goal of the QWERTY Social Network project is to develop an easy-to-use platform for sharing content and communicating online. QWERTY will address problems like user engagement and content moderation while concentrating on offering a simple and user-friendly interface, taking inspiration from established social media platforms.

Goals:

- Develop a lightweight social network website that facilitates meaningful interactions.
- Enable users to create, share, and engage with posts and comments.
- Ensure a secure, scalable, and privacy-conscious platform.

Motivation

Social media has become a cornerstone of how we connect, share, and engage with the world. However, many existing platforms face challenges like misinformation, privacy issues, and overly complex interfaces. QWERTY aims to address these pain points by offering a cleaner, more user-friendly design, stronger privacy controls, and better tools for content moderation. Whether you're an individual looking to share your thoughts, an influencer building a community, or a business connecting

with customers, QWERTY provides a space where everyone can interact meaningfully.

Client

The ideal client for the QWERTY Social Network includes individuals, influencers, and small businesses who want a simple and effective platform for sharing content and engaging with an audience.

Ideal User Description and Stakeholders:

- Individual Users: Seeking a clean and intuitive platform for sharing thoughts and connecting with others.
- Influencers: Building and managing a community with engaging content.
- Businesses: Connecting with customers and promoting products or services.
- Project Stakeholders: Development team, supervisors, and end users.

The Project

Project Definition:

• The QWERTY Social Network is a web-based platform designed to facilitate content sharing and meaningful interactions among users.

End Product Functionality:

- User registration and authentication. (e.g. JWT)
- Post creation and commenting features.
- Upvoting/downvoting system to promote popular content.
- Topic-based categories for better content organization.

Main Components of the Software System:

- Frontend: User interface for content interaction and engagement.
- Backend: Server-side logic for user authentication, post handling, and voting management.

• Database: Storing user profiles, posts, and comments.

Usage:

• The platform will be accessible via a web browser. Users can create accounts, interact with posts, and engage in discussions seamlessly.

Justification

The QWERTY Social Network can be efficiently developed using a straightforward and scalable Client–Server–Database architecture. The front end will be built with HTML, CSS, and JavaScript, ensuring a clean, responsive, and easy-to-navigate interface. On the back end, PHP will handle the server-side logic, enabling dynamic content updates and smooth interactions. For data storage, we will use MySQL, a reliable and efficient system for managing structured data like user profiles, posts, and comments. This combination of technologies offers a cost-effective and widely supported solution, simplifying platform maintenance and facilitating scalable growth as user demands increase.

Technical Requirements

Specific Tools Needed to Complete the Project:

• Frontend: HTML, CSS, JavaScript

• Backend: PHP, WebServer

• Database: SQL, MySQL

• Development Tools: IDE (PHPStorm/SublimeText), Terminal, Git & GitHub

• Server: localhost, Apache