Building a Social Media Platform Capable of Scaling to a Million Users Overnight

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Abstract

This is a brief summary of your dissertation. It should outline the research question, methodology, results, and conclusions.

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Introduction

1.1 Motivation

In today's increasingly digital-centred landscape, social media can transform lives and connect us in ways our ancestors could never have imagined. Social media enables friends and family to share their lives, connects customers to businesses directly, allows fans to interact with their sports teams and players, and helps employees find new jobs. Social media has allowed us to connect more and "play a positive role in strengthening the relationship between friends" (Chen et al. 2016).

One such social network that has seen consistent growth is LinkedIn. This professional social network connects professionals across all industries with their peers and colleagues. Whilst it is the gold standard, it would be impossible for the network to cater to the needs of each industry individually. This project aims to create a new social media platform enabling computer science students and software engineers to show off their personal projects

to their network, giving them a single place to direct friends, colleagues and recruiters to display their skills and engineering and creative skills. In the software industry, personal projects and past achievements are more valuable than academic grades as they show a willingness to learn and interest in software outside of work, leading to a more overall picture of a candidate than just an assessment centre.

New social media platforms often start out slow but eventually hit a critical mass where growth becomes exponential, as with BeReal. In just two years, this pandemic-born platform exploded to an active user base of over 70 million users (Curry 2025). One of the key focuses of this project, then, should be to create a social media platform that is highly scalable and can cope with the demands of millions of users overnight.

1.2 Aims and Objectives

1.3 Scope and Limitations

1.4 Dissertation Structure

Background

Design

Implementation

Testing and User Feedback

Reflection and Evaluation

Bibliography

Chen, L., Zhu, J., Tang, Y., Fung, G., Wong, W. & Li, Z. (2016), The strength of social networks - connecting people and enhancing relationship, in '2016 IEEE 20th International Conference on Computer Supported Cooperative Work in Design (CSCWD)', pp. 470–475.

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Appendix