

**DEVELOPMENT OF MOBILE ECOSYSTEM FOR
SGU STUDENTS AND ALUMNI**

By

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BACHELOR'S DEGREE
in

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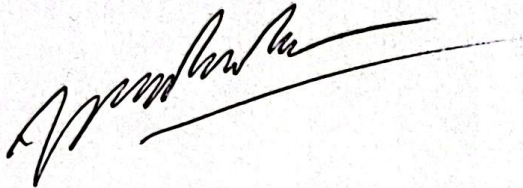


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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.



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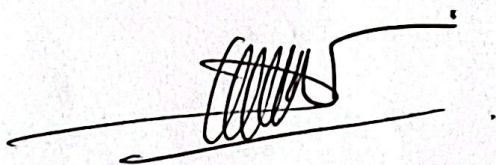


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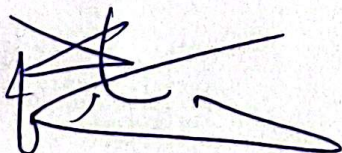


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ABSTRACT

DEVELOPMENT OF MOBILE ECOSYSTEM FOR SGU STUDENTS AND ALUMNI

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SWISS GERMAN UNIVERSITY

Swiss German University (SGU) students and alumni rely on fragmented informal channels such as WhatsApp, LinkedIn, and Instagram, leaving the student-alumni network weak and institutional information difficult to reach. A pre-research survey confirmed this gap, with 54.2% of respondents reporting a weak network and over half of alumni never hearing about institutional events. This research develops and evaluates a centralized mobile ecosystem that unifies students, alumni, the alumni association, and the administration into one verified platform spanning five functional areas: 1:1 networking, community and mentoring, alumni-posted employment opportunities, news and events, and profile management. The application was built using a Waterfall methodology with Flutter for the cross-platform mobile app, ReactJS for the administrative web portal, and Node.js with MySQL for the backend, deployed on Hostinger Cloud (Linux) with separate frontend and backend subnets secured by SSL. Evaluation combined unit testing, functionality testing, compatibility testing, User Acceptance Testing (UAT), the System Usability Scale (SUS), and the Technology Acceptance Model (TAM) validated through PLS-SEM on a deployment of 48 users. The application achieved a combined SUS score of 90.06, well above the industry baseline of 68, and a 98.93% task success rate, with the TAM model explaining 61.3% of behavioral intention. The deployed ecosystem establishes a unified networking infrastructure that improves post-graduation employment access, centralizes institutional content, and sustains professional interaction within the SGU community.

Keywords: mobile ecosystem, technology acceptance model, system usability scale, alumni networking, PLS-SEM



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DEDICATION

I dedicate this work to connect SGU students and alumni and to increase the employment opportunities of all SGU members.



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