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Assessment 1

Project Proposal Report

MODULE NAME: CHANGEMAKERS, CREATIVITY AND VALUE CREATION

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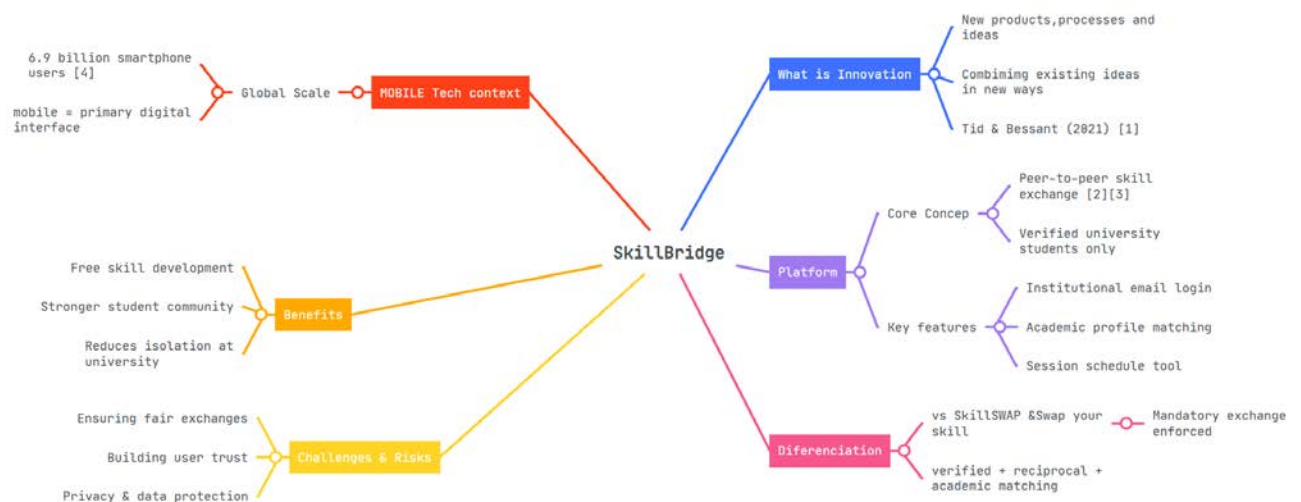
Introduction

The relationship between creativity, technology and everyday problem-solving is at the centre of this proposal. The project put forward here is SkillBridge, a mobile application that enables university students to exchange skills with one another on a direct, reciprocal basis.

The idea came from an observation made during the first year of study. Students regularly have skills that their peers would benefit from, but there is no dedicated platform built specifically for that kind of exchange within a university setting. Most existing apps either charge for access,[5] allow passive use without requiring anything in return, or are simply not designed with a student community in mind. SkillBridge is intended to address that gap.

This proposal is organised across three tasks. Task 1 covers the ideation process, including how innovation has shaped the computing sector and how the SkillBridge idea was developed and compared against other possibilities. Task 2 defines the project scope, the proposed solution, the research tools and technologies to be used, a project schedule and a risk assessment. Task 3 addresses the development methodology and presents two pieces of early design work: a user flow diagram and wireframe screen layouts.

Task 1 Mind map:



Creativity and innovation play a central role in shaping society and fostering personal development. Creativity refers to the generation of novel and original ideas, while innovation involves the practical implementation of these ideas to create value[7]. Together, they drive social progress, economic growth, and individual growth by enabling the solution of complex problems and improving human interactions and institutions.

In this context, the proposed project is SkillBridge, a mobile peer-to-peer skill exchange application designed exclusively for university students. SkillBridge is built on a mandatory reciprocal 1:1 barter system, where users can only learn a skill after teaching another, ensuring fairness in the learning process. Access to the platform is restricted to verified university students through institutional email verification, which enhances trust and safety within the academic community.[1]

The motivation for the project stems from the recognition that university students possess valuable skills they can teach, as well as specific skills they wish to learn, yet there is currently no dedicated, safe, and free platform to facilitate this exchange within the university environment [2] Existing applications often charge fees, operate on a one-way learning model, or lack sufficient trust mechanisms. Furthermore, university life can be isolating, and private tutoring is frequently expensive. SkillBridge addresses these challenges by reducing educational inequality and promoting a more collaborative and inclusive learning culture.

The application incorporates several core features, including verified sign-up, detailed skill profiles (what users can teach and what they want to learn), smart matching based on course, academic year, and skills, session scheduling, in-app chat, and a post-session feedback and reputation system. From a technical perspective, the project will utilise cross-platform mobile development with Flutter or React Native, secure user authentication, a robust database for profiles and matches, and a rule-based or basic AI matching algorithm. The development process will follow a Design Thinking approach, beginning with Figma prototypes focused on simple and intuitive user experience.[3]

Theoretically, SkillBridge draws upon Vygotsky's Zone of Proximal Development, which emphasises the value of peer learning, and Chesbrough's Open Innovation framework, which highlights the benefits of collaborative knowledge creation. The project also adopts a pragmatist research approach, combining user-centred design with practical implementation and evaluation through surveys, interviews, and usability testing.

The expected benefits include free skill development, stronger student communities, improved employability, and reduced social isolation among university students. The platform has the potential to scale to other educational institutions. However, key challenges such as ensuring fair exchanges, maintaining teaching quality, protecting user privacy, and sustaining user participation will require careful attention during development and testing.

SkillBridge represents a practical application of creativity and innovation in higher education. By transforming informal peer knowledge sharing into a structured, trusted, and reciprocal system, the project contributes to both societal development through more accessible education and personal growth through enhanced learning opportunities and community building.[4]

References:

- [1] J. Tidd and J. Bessant, *Managing Innovation: Integrating Technological, Market and Organisational Change*, 7th ed. Chichester, UK: Wiley, 2021.
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- [3] V. Baza, "Building a Peer-to-Peer Learning Platform for University Students Using Mobile Technology and WebRTC," in *Proc. IEEE Conf. on Frontiers in Education (FIE)*, 2024, pp. 1–9. doi: 10.1109/FIE61694.2024.10958330.
- [4] Statista, "Number of smartphone users worldwide from 2014 to 2029," 2025. [Online]. Available: <https://www.statista.com/statistics/330695/number-of-smartphone-users-worldwide/>

Ideation and Innovation

Innovation

Innovation is described as the process of turning new ideas into practical solutions that create value for people. It is not only about inventing something completely new, but also about improving or combining existing things in smarter ways. The unit also explained that innovation and creativity are connected, creativity helps generate original ideas, while innovation turns those ideas into something useful that can benefit society or individuals.

Innovation shapes the world by driving economic growth, solving everyday problems and changing how we live, work and learn. Creativity plays a big role because it allows people to question old habits and come up with better approaches. For me, as a Computing student, this is interesting because new technologies can make education more equal and accessible for everyone.

A good example in the higher education and EdTech industry is mobile peer-to-peer technology. Smartphones have created a lot of innovation in education. There are currently around 7.3 billion smartphone users worldwide [8]. This technology is used in different areas such as delivering online courses, supporting collaborative study groups, and enabling direct skill sharing between students. In the UK, universities use mobile apps for lecture access and campus services. In countries like India and parts of Asia, mobile platforms help students who cannot afford expensive laptops or private tutors. Overall, mobile peer-to-peer tools make learning more flexible and personalized.

Ideation

When choosing my project idea, I wanted something connected to my Computing degree and that used mobile technology in a useful way. I researched a few options:

an AI app to detect food waste with the phone camera, a mental health app for shift workers, and a gamified recycling system. I evaluated each one asking three questions: Does it solve a real problem students face? Is it technically possible for me to build as a Computing student? And does it bring meaningful social value?

After thinking about it, I chose to develop SkillBridge – A Peer-to-Peer Skill Exchange Mobile Platform for University Students. This idea fits well with what I am studying (mobile app development, databases, user experience and basic algorithms) and uses mobile technology to connect students directly.

Project title: SkillBridge – A Peer-to-Peer Skill Exchange Mobile Platform for University Students

Aim and Objectives of your project:

Aim: The aim of this project is to design and evaluate a mobile application that allows verified university students to exchange skills on a reciprocal basis, improving access to academic and professional skills while building stronger peer learning communities in higher education.

Objectives:

This project aims to analyse and develop an innovative solution to support peer-to-peer learning within the university context. Initially, a review of existing peer-to-peer learning platforms will be conducted in order to identify their features, limitations, and gaps, particularly in relation to university students' needs.

Following this, research will be carried out among students at the UWTSD London Campus through a survey. This stage will help identify common skill gaps, academic challenges, and areas where students require additional support, providing valuable data to guide the development of a more effective and targeted solution.

Based on the findings, a prototype will be designed and developed, incorporating key features such as verified login, reciprocal matching between users, and detailed academic profiles. The aim is to facilitate connections between students who can mutually benefit from each other's knowledge and skills.

Subsequently, the prototype will undergo usability testing involving at least 20 students,[9] allowing for the evaluation of its effectiveness, ease of use, and overall user satisfaction. The results of this testing phase will be essential in identifying improvements and validating the feasibility of the proposed solution.

Finally, an assessment will be conducted to determine whether the model can be scaled and implemented across other higher education institutions, taking into account factors such as adaptability to different academic environments, technical scalability, and its potential impact on student learning.

Brief Description of the Project Idea:

SkillBridge is a mobile application that enables university students to teach and learn skills through a peer-to-peer exchange system, where users must offer a skill in return for learning another. Access is restricted to verified university students, ensuring a safe and trusted environment. The platform matches users based on course, year of study, and skill sets.

The app promotes collaborative learning and provides an affordable way for students to develop practical skills, especially in contexts where access to formal education or tutoring is limited. Similar platforms are used differently worldwide, supporting both informal learning in developed countries and accessible education in developing regions.

This project aims to reduce educational inequality by offering a free platform that enhances skill development, social interaction, and employability. While it presents benefits such as increased access to skills and stronger student connections, challenges include ensuring fair exchanges, maintaining teaching quality, and building user trust.[10]

Overall, SkillBridge supports students, benefits universities through higher engagement, and helps prepare graduates with practical, real-world skills.

Research

To help me achieve the project aim and objectives, I searched for relevant sources. I focused on books about innovation, theories of learning, and recent information about skill-sharing platforms. The key sources I found are:

1. Recent articles and reports on peer learning in higher education (including platforms like PeerStudio and general EdTech trends) will support my literature review and show how my project can fill a specific gap for university students with mandatory reciprocity and institutional verification [11].
2. A 2025 paper about peer-to-peer skill exchange platforms shows real examples and gaps in current apps, helping me with objective 1 (reviewing existing platforms).
3. Chesbrough's open innovation theory explains the benefits of collaboration instead of working alone, which is perfect for a peer-to-peer platform like SkillBridge.[12]

Task 2

Project Scope

The chosen technology is mobile application development, with a specific focus on peer-to-peer platform architecture. The industry context is higher education and EdTech. SkillBridge sits where these two overlap, applying mobile platform design to an unmet need within a university environment.

Within a university, the areas most directly touched by this kind of technology are student services (community-building and wellbeing), academic faculties (which benefit from cross-disciplinary skill sharing between students), and IT services (which would handle institutional email verification and data security). At UWTSD London Campus, the initial scope covers students across all year groups and programmes, with a pilot sample drawn primarily from Computing and Business.[11]

The main benefits of the chosen technology in this context are that students already own smartphones, so no specialist hardware is needed; the platform model is scalable to other campuses without major redevelopment; and push notifications and in-app messaging reduce the friction involved in arranging sessions. The main drawbacks are that the app depends on sustained engagement, the matching algorithm needs to be genuinely useful rather than just superficially functional, and privacy risks around user data need to be carefully managed under GDPR.

Looking further ahead, the technology has real potential to evolve. As AI-assisted matching becomes more accessible, SkillBridge could move from a manually filtered system to one that intelligently recommends partners based on skill complementarity and scheduling compatibility. There is also scope for integration with platforms like Moodle, which could allow skill exchange sessions to contribute to co-curricular records or employability portfolios.

Proposed Solution

The research philosophy I chose for this project is pragmatism. I picked this approach because it is practical and flexible. According to Creswell and Creswell, pragmatism means using whatever research methods work best to answer the questions, instead of sticking to just one way of thinking [13]. For SkillBridge, this fits perfectly. I will combine quantitative data from the survey (like statistics on what skills students want to learn or teach) with qualitative insights from interviews and usability testing. Numbers alone would not tell me why students might like or dislike the app, and personal stories without data would not show the bigger picture. I need both to understand the real demand and the user experience.

The main motivation for this project comes from something I have noticed myself as a student. Most of us have at least one skill we are reasonably good at and at least one area where we struggle or want to improve. However, there is no simple, safe and free way inside the university to connect people who can help each other. General apps exist, but they often feel random, require payment, or let people only

take without giving anything back. That is why I believe a reciprocal system could work well here at UWTSD London Campus.

The problem SkillBridge tries to solve is quite structural. Existing platforms usually lack proper trust (anyone can join), do not force a fair exchange, or are not designed specifically for university students. By making the skill exchange mandatory instead of optional, the app encourages both sides to invest time and effort. This idea is supported by Vygotsky's concept of the Zone of Proximal Development, where people learn best when working with peers who are slightly more advanced in a skill [5]. It also follows the spirit of design thinking from Brown, which emphasises understanding the user deeply and iterating based on real feedback [14].

With this proposed solution, I expect the research to confirm whether there is genuine interest in a reciprocal skill-sharing app, to find out which features students value most (such as verified login or smart matching), and to identify usability issues early so I can improve the prototype before it is too late. In the end, the goal is to create something useful that actually helps students learn from each other in a fair and supportive way.

Research tools, Technologies and Resources

To identify relevant literature for this project, three main databases were used. IEEE Xplore served as the primary source for peer-reviewed work on mobile application development, human-computer interaction and educational technology. The ACM Digital Library covered computing-specific research, particularly around collaborative systems and user experience design. Google Scholar was used more broadly to find work from adjacent areas including behavioural science and educational theory, as well as to locate older foundational texts that are still widely cited in current literature.

The main search terms used were: peer-to-peer learning platform, skill exchange mobile app, reciprocal learning university, and EdTech innovation higher education. Each source was checked for credibility using the CRAAP test [15], which evaluates how current, relevant, authoritative, accurate and purposeful a source is. Peer-reviewed publications from the last five years were prioritised where possible, though a small number of older foundational works were kept in, specifically Vygotsky and Amabile, because they remain widely cited in current research and their core arguments have not been replaced by more recent literature.

For the development of SkillBridge, four main technologies are planned. React Native will be used to build the mobile app, as it works on both iOS and Android from a single codebase, which is practical for a student project. Firebase will handle user authentication through university email addresses and store the application data. Figma will be used to design and test the wireframes with participants before any actual development begins. Google Forms and Microsoft Excel will support the research side, handling the survey distribution and the analysis of responses.

Conclusion

The development of the SkillBridge proposal demonstrates that the relationship between creativity, technology, and everyday problem-solving is at the heart of modern education. Throughout this report, it has been shown that while university students possess a wealth of valuable skills, they often lack a dedicated, safe, and free platform to share them. By implementing a mandatory 1/1 reciprocal barter system, this project moves beyond simple networking; it creates a structured environment where every participant is valued as both a teacher and a learner.

Rooted in the Pragmatist research philosophy and Design Thinking, SkillBridge is designed to be a practical solution tailored to the specific needs of the UWTSD London Campus community. By utilizing accessible technologies like React Native and Firebase, the platform offers a scalable model that can eventually benefit other higher education institutions.

Ultimately, SkillBridge represents a commitment to reducing educational inequality and fostering a more collaborative campus culture. By transforming informal peer knowledge sharing into a trusted, institutionalized system, the project empowers students to enhance their employability and personal growth through the most valuable resource available: each other.

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