|  |
| --- |
| Name: Jayawardena Kavinda |
| Student Reference Number: 10952523 |



|  |  |  |
| --- | --- | --- |
| Module Code: PUSL2023 | Module Name: Mobile Application Development | |
| Coursework Title: Final Report of the Coursework - TechLink | | |
| Deadline Date: 04/04/2025 | | Member of staff responsible for coursework:  Mr. Diluka Wijesinghe |
| Programme: BSc (hons) Software Engineering | | |
| Please note that University Academic Regulations are available under Rules and Regulations on the University website [www.plymouth.ac.uk/studenthandbook](http://www.plymouth.ac.uk/studenthandbook). | | |
| Group work: please list all names of all participants formally associated with this work and state whether the work was undertaken alone or as part of a team. Please note you may be required to identify individual responsibility for component parts.  10952523 - Jayawardena Kavinda  10952463 - Dulaj Hewage  10952470 - Unagollage Wijesinghe  10952545 - Witharamalage Sirimewan  10952565 - Pathiranage Didula Theekshana  10953075 - Duwage Perera  10952645 - Chamathka Abeykoon  10952629 - Rathnayaka Rathnayaka  ***We confirm that we have read and understood the Plymouth University regulations relating to Assessment Offences and that we are aware of the possible penalties for any breach of these regulations. We confirm that this is the independent work of the group.***  ***A close up of a sign  AI-generated content may be incorrect.***  Signed on behalf of the group: | | |
| Individual assignment: ***I confirm that I have read and understood the Plymouth University regulations relating to Assessment Offences and that I am aware of the possible penalties for any breach of these regulations. I confirm that this is my own independent work.***  Signed : | | |
| Use of translation software: failure to declare that translation software or a similar writing aid has been used will be treated as an assessment offence.  I \*have used/not used translation software.  If used, please state name of software………………………………………………………………… | | |
| **Overall mark \_\_\_\_\_% Assessors Initials \_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_** | | |

\*Please \*Please delete as appropriateSci/ps/d:/students/cwkfrontcover/2013/14

**A black background with blue and grey text

AI-generated content may be incorrect.A logo with text on it

AI-generated content may be incorrect.**

**PUSL2023 – Mobile Application Development**

**TechLink**

A comprehensive platform connecting all IT Professionals, Students and enthusiasts in one integrated ecosystem.

**Group - 38**

Table of Contents

[Chapter – 01 4](#_Toc194335246)

[1.1. Introduction 4](#_Toc194335247)

[1.2. Existing systems and problem definition 4](#_Toc194335248)

[1.2.1. Existing systems 4](#_Toc194335249)

[1.2.2. Problem Definition 4](#_Toc194335250)

[1.3. Project aims and objectives 4](#_Toc194335251)

[1.3.1. Project Aims 4](#_Toc194335252)

[1.3.2. Objectives 5](#_Toc194335253)

[1.4. Scope of the project 5](#_Toc194335254)

[1.4.1. Functional Scope 5](#_Toc194335255)

[1.4.2. Out of Scope 5](#_Toc194335256)

[Chapter – 02 6](#_Toc194335257)

[2.1. Requirement gathering techniques 6](#_Toc194335258)

[2.2. Functional and Non-Functional Requirements 6](#_Toc194335259)

**No table of figures entries found.**

# Chapter – 01

## Introduction

TechLink represents a mobile application for IT professionals that creates one platform to enhance professional development while enabling professional job opportunities, technology related marketplace, knowledge and networking needs. The platform functions as a community platform where IT professionals can engage in discussions and view live sessions while displaying skills and finding job opportunities and participating in a secure marketplace. This document gives a comprehensive summary about the advancement procedure and its consequences alongside difficulties and foreseeable upgrades.

## Existing systems and problem definition

### Existing systems

Today, there are several platforms that cater professional network, search for jobs, participate in industry discussions. Among them LinkedIn is the most popular as it has a dedicated space for professionals to connect and be able to explore career opportunities.

Limitations :-

* Dedicated Marketplace for all IT related people.
* Limitations of Community collaborations.
* Unique platform to follow professional job opportunities.

### Problem Definition

IT industry needs something beyond professional networking and job searching. TechLink makes this gap by bringing together a marketplace, IT focused discussions, networking, and business/job listings in a mobile application.

Identified Key Problems :-

* Lack of IT related marketplace - There is no such mobile platform where IT people can securely buy and sell IT-related tools, software and devices within a professional network.
* Difficulty in finding IT-specific jobs and Freelance work - Even though there are many IT professionals and students around the world who struggle to get the right freelance projects, internships or tech related jobs in a structured manner.
* IT Network and learning resources are limited with these kind of applications - Part of staying on top of technological advancements, IT professionals require continuously updated discussions, podcasts and collaboration tools.

## Project aims and objectives

### Project Aims

The major aim of TechLink is to implement a detailed mobile app that consolidates all features that an IT professional, a student or an enthusiast may require in one place.

An IT specific marketplace, networking, education, collaboration, job opportunities, and an overall secure environment will integrate into a single unit.

It is aimed to bridge the gap of the IT community between the professional networking and certain IT needs, with some features that provide learning, skill development, growth to your career and product trading.

### Objectives

* Building an IT centric networking platform - Live podcasts, webinars, and hackathons open for IT professionals to talk about the technological trends, the problems with programming and career advice.
* Create a specialty IT Marketplace - Build a reliable marketplace for buying and selling IT related products, with IoT devices, software tools and hardware.
* Improving Job search and development - Include a dedicated job portal that includes full time, internship, and freelance positions tailored for IT professionals.

## Scope of the project

TechLink is designed to all-in-one application that all the IT related people can gather into a one place. And they can apply for their most matching jobs interns, buy any technology related thing like hardware, IoT tools or any device. The platform provides a dedicated space for knowledge sharing, career growth and professional connections.

### Functional Scope

* Professional Networking – A user can create a profile and participate to professional discussions like podcasts.
* IT related Marketplace – A comprehensive platform to buy and sell any kind of IT and technology related items.
* Job Portal – Listings of full time, internship and freelance opportunities.

### Out of Scope

* General E-Commerce and Non-IT related sharing.
* Advanced AI based Job recommendations. (Future Planning)

# Chapter – 02

## Requirement gathering techniques

* Competitive Analysis – Researching some similar mobile applications (LinkedIn, Fiverr, Upwork) to study their strengths, weaknesses and missing features.
* Prototyping – Create Wireframe diagrams using Figma to visualize the full app before the development.
* Document Analysis – Studying and reviewing academic papers and researches about mobile applications and IT related platforms to get some ideas about their weaknesses.
* Surveys and Questionnaires – Creating a survey from Google Forms to collect data and ideas from the IT students.

## Functional and Non-Functional Requirements