Information technology

PAT – Specifications Document - Phase 1

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Grade 10

**Table of Contents**

**1. About project 2**

**2. Motivation & Research 2**

**3. Program Functions 2**

**4. User Interface Wireframe 2**

**5. Storage 3**

**6. Hardware & Software Requirements 3**

1. **About Project**

This project is a student management project, where administrative staff or teachers can log in, load new students, allocate subjects, capture marks for tests, print and view final marks.

1. **Motivation & Research**

Main motivation for choosing this project is to make teacher’s lives easier with an easy-to-use program and to test my abilities with what I have learned in IT this year. Most of my research came from a Java Udemy Course, W3Schools, some Youtube videos and StackOverflow.

1. **Program Functions**

My final program will have the ability to:

* Add new students
* Add subjects per student per semester
* Add grades to subject per semester
* Print functionality
* Persist storage to secondary storage (database)

1. **User Interface & Wireframe**

Login Page:

A white paper with black text

Description automatically generated

Add Student Page, Course Page, Results Page and Results Sheet

A drawing of a computer

Description automatically generated

1. **Storage**

For storage I decided to use mySQL database, which I setup using mySQL Workbench for setting up schema and tables needed to persist student data.

1. **Hardware & Software Requirements**

Minimum Hardware Requirements:

* Processor - Dual-core CPU, 2 GHz or faster
* Memory – 4GB
* Disk Space – 5GB free space
* Display - 1024x768 resolution

Minimum Software Requirements:

* Operating System – Windows 10 or later
* Java Development Kit – JDK 8
* NetBeans IDE - Latest version of Apache NetBeans
* Database Server – mySQL Server Community Edition
* Database Management Service – mySQL Workbench