# EDUCATION WEBSITE UCS 542 - UI & UX Specialist Project Report

### MID SEMESTER EVALUATION

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### **ABSTRACT**

Knowledge has become essential in the age of globalization. This is an educational platform to assist students in the learning process.

The purpose of the Education application project is to automate the manual system by the help of computer software, fulfilling their requirement so that their important information can be stored for a long period of time with easy access and manipulation.

The education application can lead to error free, secure, reliable and fast management of student data. It can assist the learner to focus on the learning rather than the record keeping.

The learner can login and enroll to courses, and track his/her progress with the dashboard. This enables the student to focus on learning rather than managing the resources from different platforms as all the resources will be available within the education application. This will help increase the efficiency of the student.

# **DECLARATION**

We hereby declare that the design principles and working prototype model of the project entitled is an authentic record of our own work carried out in the Computer Science and Engineering Department, TIET, Patiala, during  $1^{st}/3^{rd}/5^{th}/7^{th}$  semester (2022).

Date: 18th September'22

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# LIST OF ABBREVIATIONS

HTML Hyper Text Markup Language CSS Cascading Style Sheets WBS Work Breakdown Structure XML Extensible Markup Language

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\*Note: Diagrams should have a detailed explanation. Do refer figure/table numbers in the running text also.

# 1. Introduction

#### 1.1 PROJECT OVERVIEW:

The education application provides students with a learning management system to get all the course resources at one place. The student can access all the courses and track his/her progress within one platform. The user will be able to access the related YouTube videos of the course he/she has enrolled for. The student can also attempt quizzes to assess his/her progress.

#### 1.2 PROBLEM DEFINITION AND SCOPE:

The resources and material of relevance present on the internet are scattered. Students who study from different websites need to move around on the internet so much that they lose their concentration and interest on the main study. Their efficiency in learning the subject is reduced. There is no organization of the topics, up-to which depth they need to be covered.

The educational application is a one-stop destination to access all the relevant course material so that the user need not have to hover around different websites. Moreover, the user can login to enroll for a course and track his/her progress. Also, the user can attempt quiz on the subject to assess his/her performance.

#### 1.3 ASSUMPTIONS & CONSTRAINTS:

It is assumed that the user is familiar with an internet browser and also familiar with handling the keyboard and mouse. Since the application is a web-based application there is a need for the internet browser. It will be assumed that the users will possess decent internet connectivity.

#### 1.4 METHODOLOGY:

We have adopted the Agile methodology to complete the project.

### 1.5 PROJECT OUTCOMES AND DELIVERABLES:

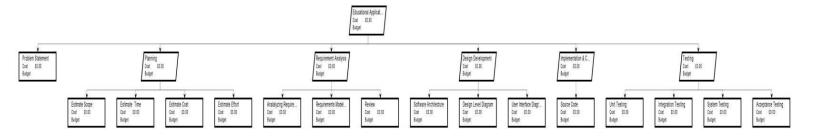
The outcome of this project is an educational web application that allows a student to get all course material in one place. The student upon login can access his/her dashboard to access the enrolled courses. Upon selection of a course, student can track the progress and access related relevant videos of the course on YouTube. Student can even attempt a quiz to assess his/her knowledge of the subject.

# 2. Methodology Adopted

### 2.1 PROPOSED SOLUTION:

The student will need to login to access his/her dashboard. The dashboard contains list of enrolled courses. Upon selection of a course, student will be able to track his/her progress of the course. There will be an organized YouTube playlist of the relevant videos related to the course. Student will also get an option to attempt a quiz to analyze and assess his/her performance.

### 2.2 Work Breakdown Structure

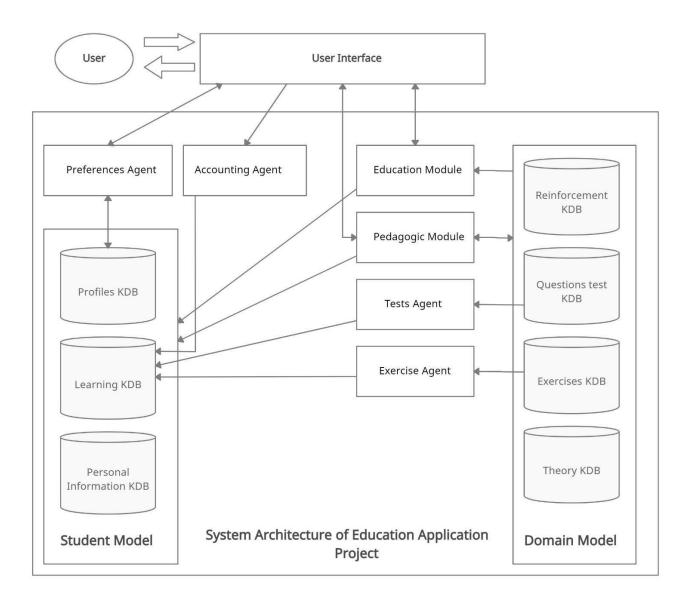


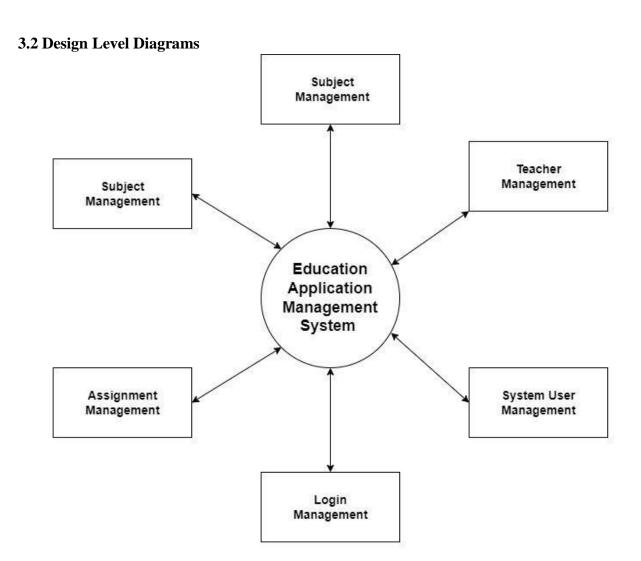
### 2.3 TOOLS & TECHNOLOGY:

- HTML5
- CSS3
- JavaScript
- XML

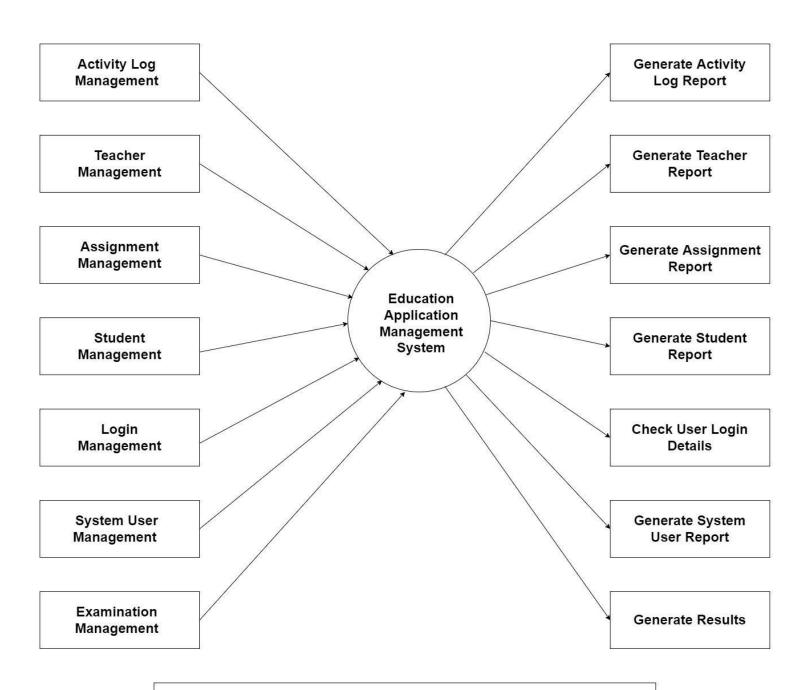
# 3. Design Specifications

### 3.1 System Architecture (Block Diagram)

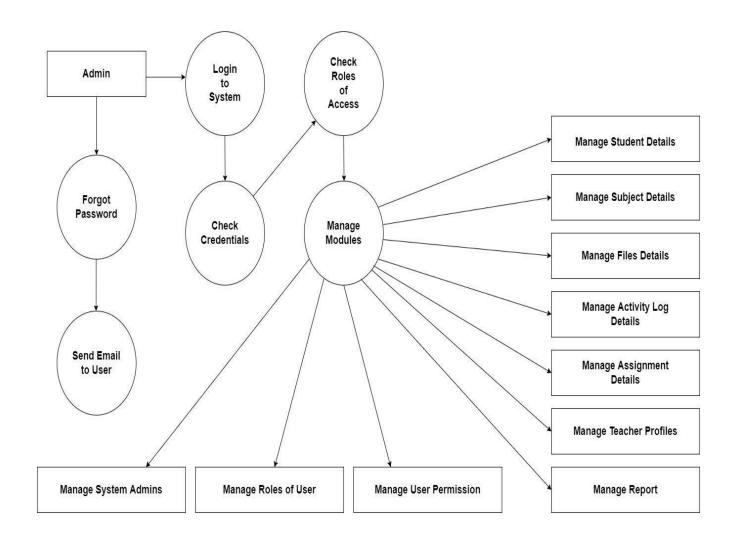




Zero Level DFD - Education Application Management System

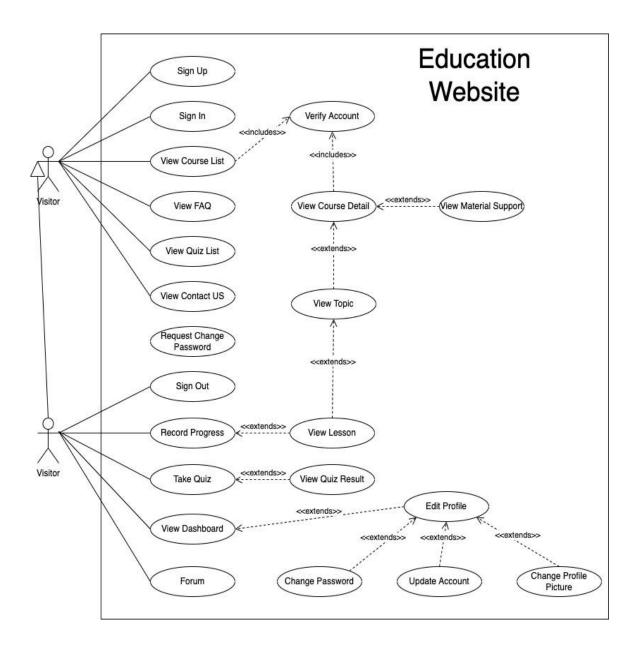


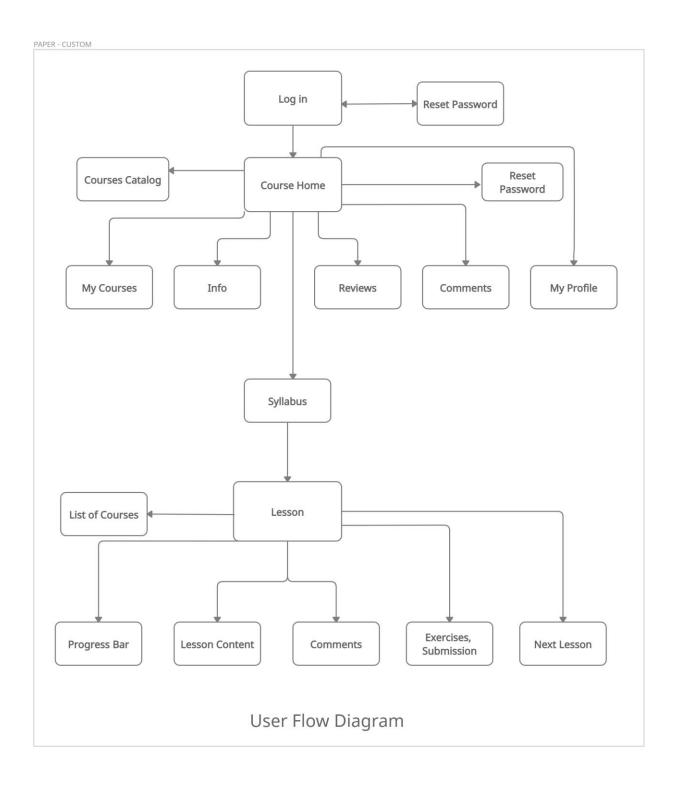
First Level DFD - Education Application Management System



Second Level DFD - Education Application Management System

### 3.3 <u>User Interface Diagrams</u>





## 4. Conclusions

#### 4.1 WORK ACCOMPLISHED:

The educational website accomplishes a kind of learning management system for users to track their learning. It allows the students to get all the study material and related course content at one place instead of hovering to different websites to search for the relevant information. The application allows the learner take a quiz to assess his/her learning for improvement.

### 4.2 ENVIRONMENTAL/ECONOMIC/SOCIAL BENEFITS:

Since, the educational website is a software, it eliminates the traditional use of paper for learning management. This makes it environment friendly.

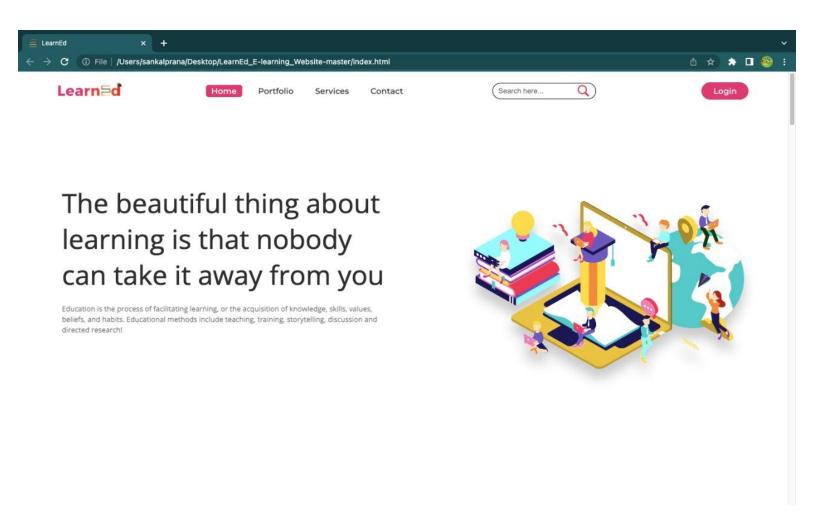
Moreover, the website is free to use for everyone and there are no membership charges, thus there are no economic benefits associated with the project.

Although, one might argue that the educational website reduces student-teacher interaction but the course is linked to the relevant YouTube videos, so the learner is socially connected with the learning community, hence, increasing collaboration.

### **4.3 FUTURE WORK PLAN:**

The future work plan for the education website might include data analytics of the user to provide in-depth analysis of the user activity. In the future, it might also include chatbot to answer some of the FAQs that new user could face. It might also include AI to recommend courses to the learner based on learning activity so that the user can learn the related subjects. In the future, the education website might also include a discussion forum where like-minded people can discuss their doubts and ideas, so that the community grows as a whole.

# 5. Website Screenshots





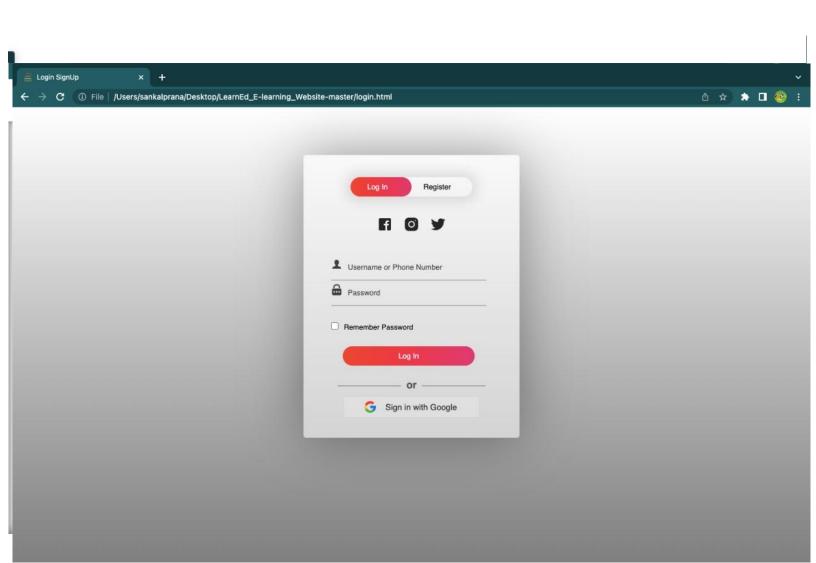
### Start Programming with Java

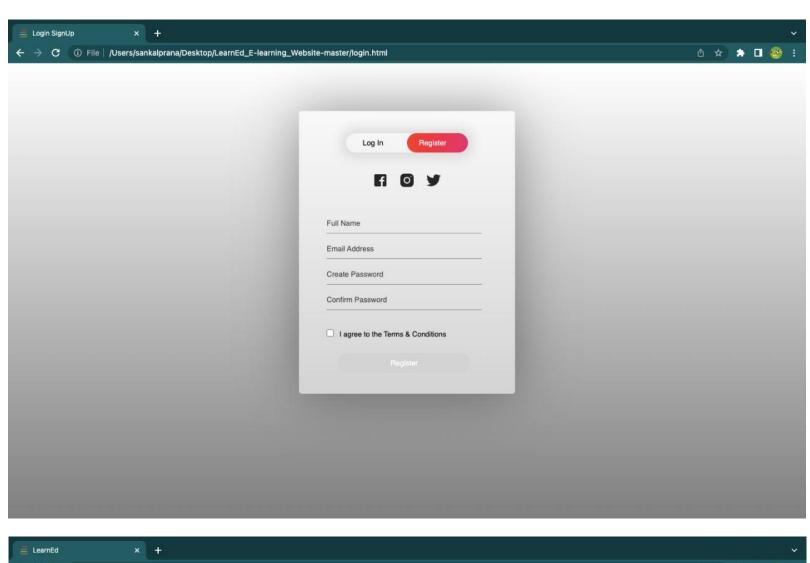
Practice and Practice to become a good Java programmer

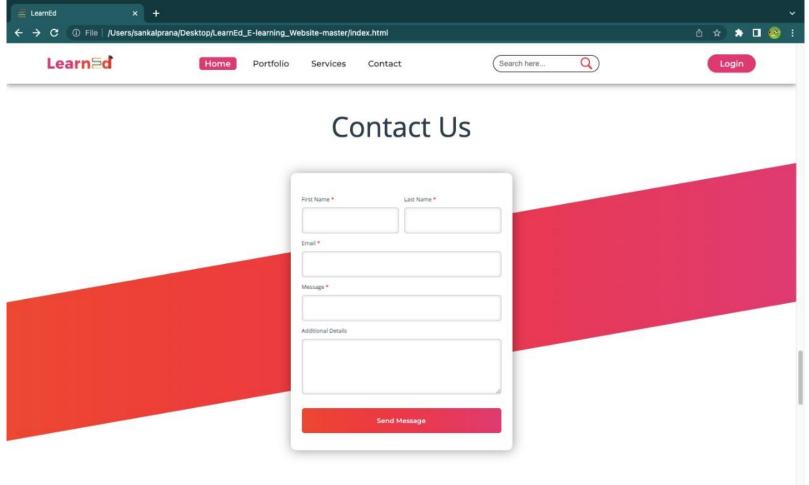


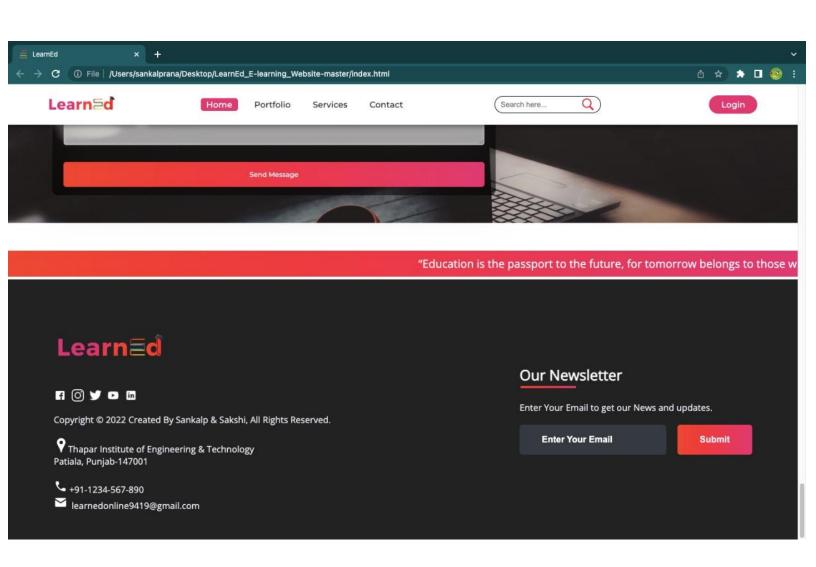


Click Here to Watch full playlist









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