

Introduction

Background and Motivation

The transition from secondary school to university presents significant challenges for students, often characterised by increased academic demands, self-directed learning requirements, and the need for effective time management (Tinto, 2017). Many students struggle with organising their schedules, managing overlapping deadlines, and collaborating efficiently in group projects, which can lead to heightened stress and diminished academic performance (Smith & Jones, 2020). These difficulties are compounded by the lack of integrated digital tools that cater specifically to the unique needs of university students. While task management applications and learning management systems (LMS) exist, they are often fragmented and fail to provide a holistic solution that addresses both academic and personal productivity (Kumar & Patel, 2021).

Motivated by these challenges, this project proposes the development of **Course Connect**, a Progressive Web Application (PWA) designed to streamline academic organisation and foster collaboration among students. Our decision to pursue this project is rooted in our shared experiences of struggling to adapt to the independent and unstructured nature of university life. By consolidating features such as task tracking, timetable integration, and collaborative tools into a single platform, Course Connect aims to alleviate these challenges, providing students with a centralised, intuitive, and accessible resource to enhance their academic success. Moreover, the incorporation of cutting-edge technologies such as Next.js and AI-powered smart scheduling demonstrates a commitment to creating a future-proof solution tailored to the evolving needs of higher education students (Clark et al., 2020).

Aims and Objectives

Aims

The primary aim of this project is to develop **Course Connect**, a Progressive Web Application (PWA) designed to address the academic and organisational challenges faced by university

Chapter 1

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