# Introduction

Project Background

**Speaker Notes:**

* **Integration Need:** Universities struggle with disjointed systems, leading to duplicated efforts and confusion.
* **Objective:** Our project aims to unify these systems into a single, efficient platform.
* **Scope:** We focused on key areas like records, courses, schedules, and data reporting to streamline operations.
* **Strategic Fit:** This project supports the university's push toward adopting efficient, modern technologies.
* **Stakeholders:** The suite will directly impact the daily activities of university staff and enhance the student experience.

### **Project Aim**

* **Objective**: Develop an efficient software solution for Woodland University College (WUC) to support management, teachers, and students.

### **Project Components**

* **Course/Record Management System**
* **Corporate University Website**

### **Implementation Steps**

* **Study Operations**: Review current practices.
* **Research Systems**: Look into similar systems.
* **Gather Requirements**: Interview key stakeholders.
* **Design**: Create wireframes and mockups.
* **Develop**: Build the system.
* **Test**: Conduct testing.
* **Finalize**: Complete and deliver the project.

### **Project Methodology: Agile**

* **Approach**: Agile Software Development
* **Advantages**:
  + **Flexibility**: Adapts to changing requirements.
  + **Incremental Delivery**: Delivers software in phases, allowing for early and continuous improvements.
  + **Iterative Process**: Works in time-bound sprints to progressively build and refine the system.
* **Why Agile?**:
  + Ideal for managing dynamic requirements and the fast-paced nature of software development.

### **Interviews**

**Speaker Notes**:

* **Dr. Simon White**: Emphasized the need for a system that manages student and staff records, handles course and module management, tracks assignments, and generates reports. This highlights the requirement for a comprehensive and integrated approach.
* **Mr. Adam Blake**: Pointed out the inefficiencies and errors in the current system, advocating for a centralized digital system. He stressed the importance of automation and real-time updates to streamline administrative tasks.
* **Dr. Raj Singh & Mr. Mark Williams**: Both stressed the need for an intuitive, user-friendly interface and mobile/web access. They also highlighted the necessity for digital submissions and automated reminders to enhance usability and efficiency.

### **Findings**

**Speaker Notes**:

* **Current System Issues**: The existing paper-based system is inefficient, prone to errors, and lacks integration across various administrative functions. This has led to difficulties in accessing and updating records.
* **Required Features**: The new system must provide real-time updates and automation to address these inefficiencies. It should offer centralized management and an improved user experience with intuitive interfaces and accessible mobile and web platforms. This will help overcome the limitations of the current system and provide a robust solution.

### **Comparable Tools Analysis**

**Title**: Comparison of Course Management Tools

**Content**:

| **Criteria** | **Google Classroom** | **Admin Dashboard** | **School System** | **NILE** |
| --- | --- | --- | --- | --- |
| **UI** | Simple, clean | Focused on management | Colorful, visual elements | Professional, data-driven |
| **Dashboard** | Basic, tasks & posts | Student management | School history & modules | Advanced analytics |
| **Stream/Feed** | Yes | Likely present | Likely minimal | Data streams, announcements |
| **Classroom Mgmt** | Easy student, assignment, grade mgmt | Student, admission, class mgmt | Student, staff, parent info | Comprehensive tools |
| **Course Mgmt** | Manage courses/modules | Student activities | School info management | Advanced tracking |
| **Student Profiles** | View/manage profiles | Manage profiles & classes | Profiles for students, staff | Detailed profiles, analytics |
| **Communication** | Posts, comments, announcements | Likely present | Announcements likely | Emails, notifications |
| **User Roles** | Admin, Teacher, Student | Admin, Teacher, Student | Detailed role management | Extensive role-based |
| **Integrations** | Google Suite | Internal tools | Educational tools | Extensive third-party |
| **Assignments** | Creation, submission, grading | Student mgmt focus | Admin tasks focus | Custom grading system |
| **Notifications** | For teachers/students | Likely present | General announcements | Advanced notification |
| **Analytics** | Basic reporting | Student & class mgmt | Administrative reporting | Advanced real-time analytics |
| **Customization** | Limited | Likely customizable | Potentially customizable | Highly customizable |

**Speaker Notes**:

* **Overview**: This slide provides a comparison of various course management tools.
* **Google Classroom**: Known for its simplicity and integration with Google Suite, but limited in customization and advanced features.
* **Admin Dashboard**: Focuses on management functionalities with a clean interface, likely offers robust reporting and role management.
* **School System**: Offers colorful visuals and focuses on administrative tasks, less on assignments and grading.
* **NILE**: Provides a comprehensive and customizable solution with advanced analytics, notifications, and integrations.

This concise slide captures the key points of each tool for easy comparison.

### **Design Procedure Overview**

**Speaker Notes:**

1. **Research and Analysis**
   * "To start the design process, we conducted research by comparing existing websites such as Google Classroom, Udemy Academy, and various admin dashboards. This helped us understand different design approaches, user interfaces, and feature sets that could inform our project."
2. **Define Design Requirements**
   * "Based on our research, we defined the design requirements by identifying the essential features and functionalities needed for our website. We considered user needs and project objectives to ensure our design would be both functional and user-friendly."
3. **Choose a Color Theme**
   * "We then selected a specific color theme for our project. The chosen palette aligns with the project's branding and goals, ensuring visual coherence. We also paid attention to color contrast and accessibility to enhance user experience."

### **Design Process**

**Speaker Notes:**

1. **Create Wireframes and Mockups**
   * "Next, we developed wireframes to outline the layout and navigation of the website. Wireframes helped us visualize the structure and how users would interact with the site. We then created mockups to illustrate the overall look and feel."
2. **User Interface (UI) Design**
   * "With wireframes and mockups in place, we focused on designing the user interface. This involved creating UI elements such as buttons and forms, ensuring they align with our chosen color theme. Consistency in design patterns was crucial to provide a seamless user experience."
3. **Prototype Development**
   * "We built interactive prototypes to simulate user interactions with our design. This allowed us to test design concepts and gather feedback from users. Based on this feedback, we made necessary adjustments to improve the design."
4. **Final Design and Handoff**
   * "Finally, we refined the design and prepared it for development. This included finalizing design specifications and providing all necessary assets to the development team to ensure a smooth transition from design to implementation."

### **Slide: Problem Domain Description**

**Title:** Challenges in Record Management at WUC

**Content:**

* **Student Record Management:** Maintaining accurate and up-to-date records for effective administration.
* **Staff Record Management:** Ensuring efficient storage and retrieval of staff information.
* **Course/Module Management:** Managing course syllabi, curriculum materials, and assessment data.
* **Attendance Management:** Accurately tracking student attendance for monitoring and support.
* **Report Generation:** Generating comprehensive and timely reports for informed decision-making.
* **Assignment Management:** Handling submission, grading, and tracking of student assignments.

**Speaker Notes:**

"The problem domain of Woodland University College focuses on several key challenges in record management, which significantly affect the institution's operations.

Firstly, maintaining accurate and up-to-date student records is crucial for effective administration but poses significant challenges. Similarly, efficient storage and retrieval of staff information are essential for maintaining a well-organized workforce.

Managing course syllabi, curriculum materials, and assessment data is another critical aspect, vital for delivering quality education and ensuring academic integrity. Additionally, tracking student attendance accurately is necessary for monitoring engagement, enforcing academic policies, and providing timely support.

The ability to generate comprehensive and timely reports is also crucial, as it directly impacts decision-making processes. Lastly, the management of assignments, including submission, grading, and tracking, is a critical component that requires streamlined processes to ensure the educational process runs smoothly.

Addressing these challenges through a robust course management system will enhance the institution's efficiency and contribute to better educational outcomes."