

# Project Report: Skedule - A Web-Based Calendar Application Prototype

## Abstract

Skedule is a web-based calendar application prototype designed to assist students in managing their academic schedules, including courses, assignments, exams, and campus events. This prototype focuses on the frontend implementation, providing a static user interface for adding, viewing, and deleting events. Future development will include backend integration and database support to enhance functionality and data persistence.

## Introduction

Effective management of academic schedules is critical for students. Skedule addresses this need by offering a comprehensive platform for organizing course timetables, event calendars, and reminders. The current prototype demonstrates the basic functionalities of the application using modern web technologies.

## Objectives

- To develop a static prototype of an interactive calendar application.
- To create a user-friendly interface for managing academic events.
- To lay the groundwork for future enhancements, including database integration and backend development.

## Methodology

### Technologies Used

- **Frontend:** HTML, CSS, JavaScript
- **Libraries and Frameworks:** jQuery, evo-calendar
- **Fonts and Icons:** Google Fonts, Font Awesome
- **Storage:** Local Storage for temporary event persistence

### Development Process

- **Requirement Analysis:** Understanding the needs of the target users (students) and defining the core features for the prototype.
- **Design:** Creating wireframes and UI designs for the application.
- **Implementation:** Developing the static frontend with basic calendar functionalities.
- **Testing:** Conducting basic testing to ensure the prototype is functional and user-friendly.

# Implementation

## HTML Structure

The HTML structure is divided into several sections:

- **Header:** Contains the logo and navigation links.
- **Lander:** Introduction and call-to-action button.
- **Welcome Section:** Describes the platform and its benefits.
- **Features Section:** Highlights the key features with links to detailed sections.
- **Time Table, Events, Reminders Sections:** Placeholder sections for specific functionalities.

## JavaScript Functionality

- **Calendar Initialization:** Calculates and displays the current month and days, including previous and next month overflow days.
- **Navigation Functions:** Allows users to navigate between months and go to the current month.
- **Event Management:** Users can add, view, and delete events. The events are stored in local storage for temporary persistence.

## CSS and External Libraries

- Custom styles are applied to ensure a visually appealing interface.
- Google Fonts and Font Awesome enhance the typography and iconography.

## Results

The Skedule prototype successfully demonstrates a basic tool for students to manage their academic schedules. Users can navigate the calendar, add events, and delete events using the static interface. The prototype is responsive and performs well across different devices and browsers.

## Conclusion

Skedule serves as a promising prototype for a student schedule management tool. The application meets the initial objectives, offering a user-friendly interface and basic functionalities for event management. The groundwork laid by this prototype will facilitate future development and enhancements.

## Future Work

- **Backend Development:** Implement a backend using Node.js, Express, or similar technologies.

- **Database Integration:** Add a database (e.g., MongoDB, MySQL) to store events persistently.
- **User Authentication:** Enable user authentication to provide personalized experiences and secure access to schedules.
- **Mobile Application:** Develop a mobile version of Skedule to enhance accessibility.
- **Notification System:** Implement push notifications for reminders and upcoming events.
- **Integration with Academic Portals:** Integrate with university portals to automatically import course schedules and events.