

WebTechnology Project Report

Attendify App

Team Members:

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The **Attendify App** is an Android-based solution designed to help students efficiently manage their academic attendance. The app provides dynamic course management, attendance tracking, and low attendance notifications, enhancing student productivity.

App's Functionalities:

1. Google Sign-In:

- Users log in using their Google accounts, with details such as username and email retrieved via Firebase Authentication.

2. Department & Semester Selection:

- Upon successful login, users can choose their department and semester, which determines the courses displayed.

3. Dynamic Course Management:

- The app integrates with Firebase Firestore to fetch courses dynamically based on the selected department and semester.
- Each course displays:
 - Missed hours
 - Total hours
 - Attendance percentage
 - Remaining skips

4. Attendance Tracking:

- Users can update missed hours for each course, which recalculates the attendance percentage.
- If attendance falls below 75%, a notification alerts the user.

5. Low Attendance Email Notification:

- Automatic email alerts are sent to users when their attendance percentage drops below the threshold.

6. Location-based Services:

- The App utilizes Android's **LocationListener** and **Geocoder** to retrieve the user's geographical location and convert it into a detailed address, including the state.

7. About Page:

- This activity provides information about the app, its functionalities, and its development team.

8. Logout:

- Users can securely log out of the app through the Google Sign-In feature.

9. Attendance Calculator:

- A built-in calculator helps users manage missed hours and calculate remaining skips to stay on track with attendance requirements.

10. Graphical Animations:

- Smooth transitions and animations enhance the user interface, providing visual feedback during interactions.
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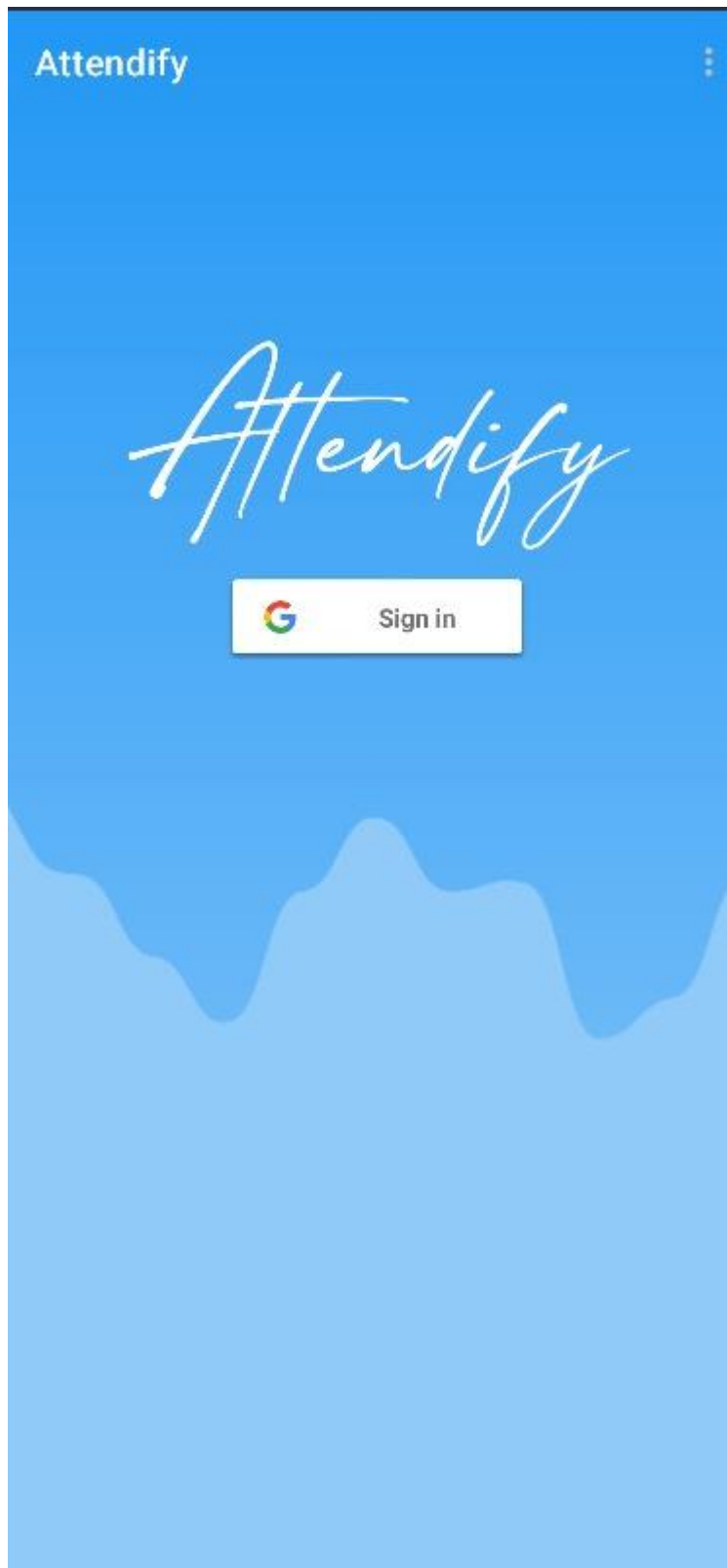
App source file:

[Attendify](#)

Execution Output Screenshots

Login Screen:

When the app is launched, the user is prompted to sign in using Google.



Department & Semester Selection Screen:

After logging in, the user selects their department and semester.

Attendify



Attendify

Department

Information Technology

Semester

1

SUBMIT

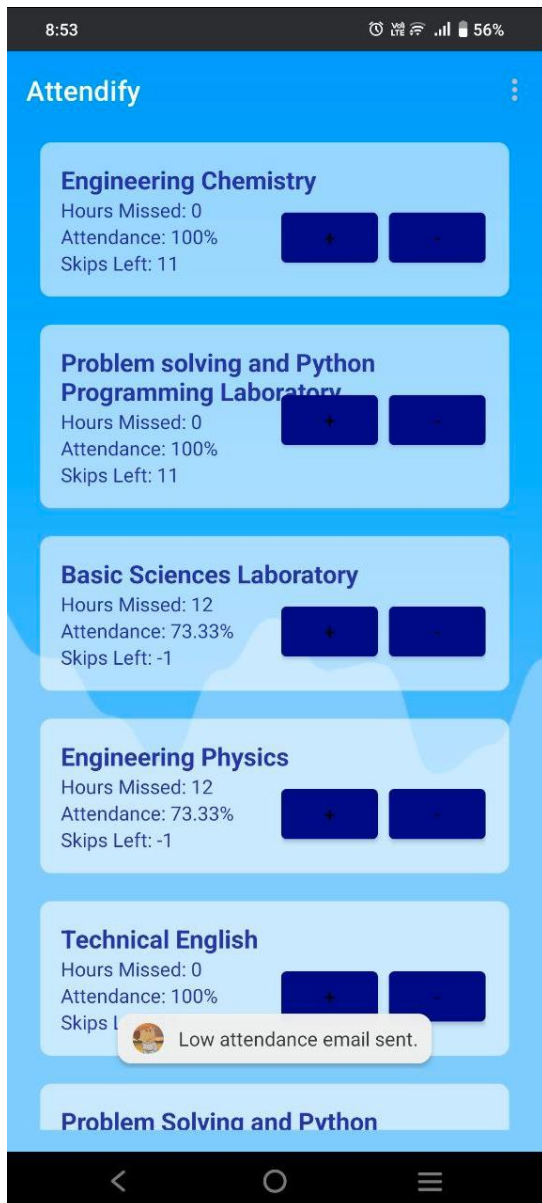
Attendance Screen:

- Displays all courses dynamically fetched based on the selected department and semester.
- Includes missed hours, total hours, attendance percentage, and skips left.



Low Attendance Email Notification:

Screenshot of the app triggering a low attendance notification email.



About Screen

An informational page about the app and its functionalities, providing details about the app's purpose and usage.



About Attendify

Welcome to Attendify – your digital companion for seamless college management.

Attendify helps students stay connected and organized by providing a platform to manage academic details, schedules and more. Our goal is to simplify administrative tasks and enhance communication, making campus life more efficient and engaging.

Key Features:

- Update and manage academic information like department, semester, and more.
- Access your schedule and notifications in one place.
- Organize your Attendance for every subject.
- Stay informed about the low attendance criteria

We are committed to making your college experience smoother, smarter, and more enjoyable.

Done by:

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Conclusion

The **Attendify App** effectively assists students in monitoring and managing their attendance, leveraging real-time database integration and intuitive UI/UX. The app's ability to send low attendance alerts

and dynamically fetch attendance details from Firebase enhances its utility for students.

Technologies Used:

- **Firebase Firestore:** Real-time database management for courses and attendance details.
- **Google Sign-In:** Secure user authentication and profile management.
- **Event Listeners:** To manage user interactions efficiently.
- **Email Notifications:** Alerts users about critical attendance issues.
- **Graphic Animations:** Improves the user interface experience.
- **Location Services:**