

## WAP1:

<b>Title:</b>	Graphical Password Authentication System for Enhanced Security and User Convenience
<b>Objective:</b>	<p>The primary goal of this project is to develop and implement a graphical password authentication system that offers users an intuitive and secure way to access online platforms. By selecting a series of graphical objects in a predetermined sequence, users can establish a distinct login pattern. Subsequent login attempts shuffle the chosen images while maintaining the original sequence, adding an extra layer of security against hacking attempts. This project seeks to offer a user-friendly alternative to traditional passwords while addressing the limitations of existing authentication methods.</p>
<b>Summary:</b>	<p>In the digital age, managing multiple complex passwords for various online platforms can be overwhelming for users. To address this challenge, this project proposes a novel approach to authentication through a graphical password strategy. Instead of relying on traditional text-based passwords, users can create a unique login sequence by selecting specific images in a designated pattern. This innovative method enhances both security and user experience by thwarting common attack methods, such as brute force and dictionary attacks.</p>
<b>Requirements:</b>	<ul style="list-style-type: none"><li>• Innovation</li><li>• Reduced Password Fatigue</li><li>• Protection from Shoulder Surfing</li><li>• User Convenience</li><li>• Enhanced Security</li></ul>

## WAP2:

<b>Title:</b>	Scholarship Portal: Connecting Indian Students to Opportunities
<b>Objective:</b>	Develop an intuitive online portal that serves as a hub for a multitude of scholarships, both national and international, categorised by merit, field of study, and income level.
<b>Summary:</b>	India's densely populated landscape witnesses over 6 crores of diverse graduates annually, striving for education that paves the way to employment. Scholarships, based on merit, skills, and income, serve as catalysts for student excellence. Amidst a surge in scholarships due to technological advancement, information remains scattered, prompting the need for a consolidated solution. To tackle this issue, a dynamic scholarship portal is proposed. This platform will aggregate real-time data on national and international scholarships, motivating students to pursue higher merit for a brighter future.
<b>Requirements:</b>	<ul style="list-style-type: none"><li>● Community Engagement</li><li>● Educational Resources</li><li>● Notifications</li><li>● Personalised Experience</li><li>● Real-time Updates</li><li>● Application Management</li><li>● Centralised Hub</li></ul>

### WAP3:

<b>Title:</b>	AI-Powered Diet Tracking and Recommendation App with Ayurvedic Insights
<b>Objective:</b>	<p>Develop a cutting-edge mobile application with the following objectives:</p> <ul style="list-style-type: none"><li>● Gamification</li><li>● Ayurvedic Recommendations</li><li>● AI-Powered Analysis</li><li>● Diet Tracking</li><li>● Report Generation</li></ul>
<b>Summary:</b>	<p>Diet recall, a valuable dietary assessment method, involves participants recalling their past week's food and drink consumption. To enhance this approach, an innovative mobile application is proposed. This app, driven by AI and trained dietitians' insights, allows users to track the quality, quantity, and types of food consumed, aided by pictorial images. The app also offers personalised dietary recommendations based on Ayurvedic principles, considering factors like body constitution (vata, pitta, kapha), macronutrients (carbs, fats, proteins), and Ayurvedic elements (rasa). Additionally, the app generates regular reports, incorporates gamification features for user engagement, and encourages adherence through badges and points.</p>
<b>Requirements:</b>	<ul style="list-style-type: none"><li>● Motivation and Engagement</li><li>● Progress Tracking</li><li>● Data-Driven Insights</li><li>● Personalised Recommendations</li><li>● Enhanced Awareness</li></ul>

## WAP4:

<b>Title:</b>	Dynamic Document Generator Web App with JSON Integration
<b>Objective:</b>	The objective of the described web application is to create a versatile and user-friendly platform that automates the process of generating documents by filling pre-formatted templates with data from JSON files.
<b>Summary:</b>	This web application facilitates the creation and automation of pre-formatted documents using a user-friendly interface. Users can leverage the integrated TinyMCE editor to create templates or modify existing ones. The app dynamically populates these templates with data from JSON files, offering flexibility and efficiency.
<b>Requirements:</b>	<ul style="list-style-type: none"><li>• User-Generated Templates</li><li>• Error Handling</li><li>• Data Integration</li><li>• JSON Data Parsing</li><li>• Database Integration</li><li>• Document Creation and Editing</li><li>• Preview and Printing</li></ul>

## WAP5:

<b>Title:</b>	Weather-Driven Farmer Alert System for Enhanced Agriculture
<b>Objective:</b>	The objective of this project is to create a user-friendly system that utilises real weather forecast data obtained from open APIs to aid farmers in making informed decisions. By proactively notifying farmers about impending weather conditions, the solution aims to enhance agricultural practices and minimise potential risks.
<b>Summary:</b>	Developing a solution that harnesses real-time weather forecasts through open APIs to assist farmers in making informed decisions. The solution aims to provide timely warnings to farmers regarding upcoming weather conditions, enabling them to take proactive measures. User-friendliness is a key consideration, ensuring seamless interaction for farmers.
<b>Requirements:</b>	<ul style="list-style-type: none"><li>• Continuous Updates</li><li>• Multi-Platform Access</li><li>• Localised Information</li><li>• Forecast Analysis</li><li>• Customised Alerts</li><li>• User-Friendly Interface</li><li>• Weather Data Integration</li></ul>

## WAP6:

<b>Title:</b>	Smoke Detection from IP Camera Footage Using Deep Learning and Neural Networks
<b>Objective:</b>	The primary objective of this project is to create an effective and efficient smoke detection system by analysing video footage from IP cameras. By employing Deep Learning and Neural Network models and integrating tools like OpenCV, OCR, Pandas, and NumPy, the solution aims to provide real-time detection of smoking activities in the monitored environment.
<b>Summary:</b>	Developing an intelligent system for detecting smokers in video footage captured by IP cameras. This solution leverages advanced technologies such as Deep Learning and Neural Networks, along with tools like OpenCV, OCR, Pandas, and NumPy. By utilising computer vision techniques, the system aims to accurately identify instances of smoking and enhance security and safety measures.
<b>Requirements:</b>	<ul style="list-style-type: none"><li>• Data Preprocessing</li><li>• Data Management</li><li>• Real-Time Analysis</li><li>• Alert Generation</li><li>• Video Data Capture</li></ul>

## WAP7:

<b>Title:</b>	Collaborative Task Management System for Tele-caller Lead Generation Team
<b>Objective:</b>	The main goal of this project is to develop a comprehensive task management system specifically designed for tele-caller lead generation teams. The system's focus is on improving task coordination, communication, and monitoring, leading to increased efficiency and successful lead generation outcomes.
<b>Summary:</b>	Creating a collaborative task management system tailored for tele-caller lead generation teams. The system streamlines task assignment, monitoring, and communication, enhancing efficiency and productivity. By providing real-time insights and collaborative tools, the solution empowers the team to effectively manage lead generation tasks.
<b>Requirements:</b>	<ul style="list-style-type: none"><li>• Data Analytics</li><li>• Deadline Alerts</li><li>• Communication Hub</li><li>• Progress Monitoring</li><li>• Collaborative Workspace</li><li>• Real-Time Task Tracking</li><li>• Task Creation and Assignment</li></ul>

## WAP8:

<b>Title:</b>	Advanced Traffic Management System for Urban Areas
<b>Objective:</b>	The primary objective of this project is to design and implement an advanced traffic management system that leverages state-of-the-art technologies to tackle traffic congestion, optimise traffic flow, and enhance overall road safety in urban settings.
<b>Summary:</b>	Creating an innovative traffic management system tailored for urban environments. The system utilises cutting-edge technologies such as real-time vehicle tracking, intelligent signalling, and data analysis to alleviate congestion, enhance traffic flow, and elevate road safety. By integrating these components, the solution aims to revolutionise urban transportation dynamics.
<b>Requirements:</b>	<ul style="list-style-type: none"><li>• User Empowerment</li><li>• Public Transport Efficiency</li><li>• Emergency Response Optimization</li><li>• Efficient Resource Allocation</li><li>• Improved Safety</li><li>• Enhanced Traffic Flow</li><li>• Reduced Congestion</li></ul>



## WAP9:

<b>Title:</b>	Energy-Efficient Home Automation System
<b>Objective:</b>	The main objective of this project is to design and implement an energy-efficient home automation system that leverages state-of-the-art technologies to reduce energy consumption while maintaining user comfort and convenience.
<b>Summary:</b>	Creating an innovative home automation system focused on energy efficiency. The system integrates cutting-edge technologies such as energy-efficient protocols, smart sensors, and AI to optimise energy consumption within a home. By providing users with control over lighting, heating, and appliances while minimising energy waste, the solution aims to enhance both comfort and sustainability.
<b>Requirements:</b>	<ul style="list-style-type: none"><li>• User-Friendly Interface</li><li>• Heating/Cooling Management</li><li>• Energy Monitoring</li><li>• Lighting Optimization</li><li>• Appliance Control</li><li>• Energy-Efficient Protocols</li></ul>

## WAP10:

<b>Title:</b>	Portable Medical Diagnostic Device for Remote Areas
<b>Objective:</b>	The primary objective of this project is to create a compact and portable medical diagnostic device capable of performing multiple tests, providing accurate results, and transmitting data to healthcare experts in remote and underserved areas.
<b>Summary:</b>	Developing a portable diagnostic device that integrates various medical tests, such as blood pressure, glucose levels, and ECG, into a single unit. This device is intended to be self-contained, user-friendly, and capable of transmitting data to healthcare professionals in remote locations. The objective is to ensure medical diagnostics are accessible even in areas with limited healthcare infrastructure.
<b>Requirements:</b>	<ul style="list-style-type: none"><li>• Remote Accessibility</li><li>• Accuracy and Reliability</li><li>• Compact and Portable</li><li>• Power Management</li><li>• Data Transmission</li><li>• Multi-Test Integration</li></ul>