JAZAN UNIVERSITY

College of Engineering & Computer Science

Department of Computer Science

Graduation Projects

2025-26 First Semester

Supervisor:
Ms. Wafaa Hakami

Group Members:
- Ebtsiam Hussein
- Shahad Ibrahim Hakami
- Roaa Muhammad Hakim
- Laila Ali Shouk

First Position in Project Day

Abstract

This project provides an overview of **MomentJar**, offering insights into its purpose, technological foundation, and anticipated impact. MomentJar is designed as a secure digital time vault that allows users to preserve and schedule the release of personal messages, achievements, research, and historical records. Key features include multiple Vault types, secure encryption and inheritance management through the Heirloom feature. This document explores the role of MomentJar in enabling future planning, fostering intergenerational connections, and ensuring data privacy through advanced security measures. Anticipated outcomes include enhanced digital legacy preservation, secure data management, and an accessible platform that empowers individuals to pass down meaningful messages and assets. The ultimate goal is to establish MomentJar as a premier digital time vault that enriches personal and collective histories while maintaining security and authenticity

Supervisor:
Ms. Afnan Sumaili

Group Members:
- Fatimah Ali Fattahi
- Eman Yahya Shathily
- Ohoud Yahya Khubrani
- Maha Mohammed Sanba

Second Position in Project Day

TRAFFIC ACCIDENT DETECTION APPLICATION (MUGHITH)

Mughith

Abstract

On highways, many accidents occur that may cause drivers to lose control of their vehicles. In many cases, the driver may be unable to call for help due to unconsciousness or severe injuries. This is where the smart accident detection application comes into play, relying on phone sensors and artificial intelligence to detect accidents as soon as they happen and analyze sound and images to assess their severity. Instead of relying on eyewitnesses who may not be present or waiting for help that might arrive late, the application analyzes the impact force and detects any sounds indicating a crash, such as the sound of a collision or sudden braking. Once the accident is confirmed, the app displays a notification to the driver, and if there is no response within a short period, the accident location is automatically sent to emergency services, ensuring that help arrives as quickly as possible. With this technology, it is possible to reduce emergency response times, save lives, and minimize severe injuries caused by delays in rescue operations.

Supervisor:
Dr.Muhammed Ali Mohzary

Group Members:

- Rahaf Thabet Ali Sulimani
- Manar Saleh Abdullah
- Reham Abdulrahman Mohsen
- Tasneem Ahmed Abdullah

Third Position in Project Day

DeSpoof: A MACHINE LEARNING-BASED SYSTEM FOR DETECTING FACE SPOOFING ATTACKS IN VIDEO CONFERENCING PLATFORMS.

Abstract

DeSpoof is a machine learning-based system designed to improve identity verification in video conferencing. It focuses on detecting face spoofing attacks such as deepfakes, replay videos, and printed photos. The system works by projecting dynamic light patterns onto a user's face and analyzing how the light reflects off the skin. These reflections help distinguish real faces from fake ones. A lightweight Vision Transformer model processes this data in real time to ensure fast and accurate detection. The main goal is to provide a secure, efficient, and user-friendly solution that can be easily integrated into video platforms. DeSpoof aims to enhance authentication reliability, reduce fraud, and strengthen security in areas like online meetings, education, banking, and cybersecurity.

Supervisor:
Dr. Abdulrahman Alhazmi

Group Members:
- Reemas Radwan
- Elham Eshaq
- Noha Farsi
- Albndry Abdullah

HAJZI MEDICAL APPOINTMENT BOOKING APP FOR LOCAL CLINICS

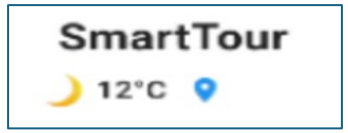
Abstract

This project introduces **Hajzi**, an Android-based clinic appointment booking system that allows users to seamlessly book appointments with local clinics. Clinics can register and add doctors, while users can browse available clinics, select the right doctor, and schedule an appointment without physically visiting the clinic. The app uses Firebase Firestore to manage the real-time database, ensuring seamless data syncing of clinic and doctor details, appointment schedules, and user interactions. Additionally, the system features a Google Maps API, allowing users to locate nearby clinics based on their current location. For security and ease of access, Firebase Authentication supports user login via email and password or social authentication. The app is designed with an intuitive Material Design UI, providing a user-friendly experience while ensuring efficiency and reliability. Hajizi offers a modern solution to simplify healthcare appointment management, making medical services easier and more efficient for both patients and healthcare providers.

Supervisor:
Mr. Syed Ziauddin

Group Members:
- Jawaher Shareef
- Aisha Almashrfi
- Nora Ali
- Almaha Miniy

SMART TOURISM NAVIGATOR FOR SAUDI ARABIA:
An AI-DRIVEN GUIDE FOR PERSONALIZED, REAL-TIME CULTURAL AND HERITAGE TOURS.



Abstract

The Smart Tourism Navigator for Saudi Arabia (**SmartTour**) is an AI-powered digital assistant designed to enhance the travel experience by overcoming common challenges such as language barriers, lack of information, and navigation difficulties. It offers features like GPS navigation, personalized recommendations, multilingual support, virtual tours, and augmented reality experiences. The system enables tourists to explore independently without relying on traditional guides, improving convenience and accessibility. Additionally, it promotes sustainable tourism by suggesting eco-friendly options and managing overcrowding. Overall, SmartTour aims to modernize tourism through intelligent, user-friendly technology that enriches cultural exploration.

Supervisor:
Dr. Abu Salim

Group Members:
- Marwa Musa Hajj
- Souq Hassan
- Alanod Yahya
- Shrifah brahim

Jazan Wonders

Abstract

The **Jazan Wonders** website is a digital platform created to promote the cultural heritage, natural beauty, and attractions of the Jazan region in Saudi Arabia. It provides users with features such as hotel booking, restaurant recommendations, and detailed tourist guides for a smooth travel experience. The platform aims to boost tourism, support local communities, and encourage economic growth. With a well-designed system architecture, database, and user-friendly interface, the project demonstrates effective technical implementation. Overall, it serves as a valuable tool for promoting sustainable tourism and showcasing Jazan as a key travel destination.

Supervisor:
Mr. Raj Kumar Masih

Group Members:

- Maram Ibrahim Hakami
- Rawan Ali Sumaaili
- Nada Ibrahim Sumaili
- Rand Muthanna Harith

A SECURE WEB BROWSER BASED ON PHISHING URL DETECTION USING MACHINE LEARNING

Abstract

This project presents a secure web browser that uses machine learning techniques—specifically Logistic Regression and Support Vector Machine (SVM)—to detect phishing websites in real time. Unlike traditional blacklist-based methods, the system analyzes URL structures to identify new and unknown phishing threats. When a malicious URL is detected, the browser blocks access and alerts the user, providing proactive protection. Trained on a large dataset for high accuracy, the solution is implemented in Python with a user-friendly interface, aiming to enhance cybersecurity through intelligent and automated phishing detection.

Supervisor:
Dr. Ala

Group Members:
- Rahaf Ali Hakami
- Fatimah Ahmad Faqih
- Layan Ali Shamakhi
- Halyah Hasan Kilani

SMART PET COLLAR: ADVANCED HEALTH MONITORING AND TELE-VETERINARY INTEGRATION

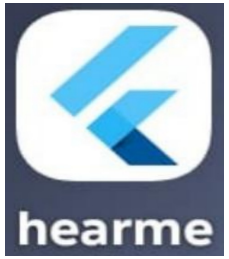
Abstract

This project addresses the challenge of monitoring pet health effectively, as many pet owners struggle to detect early signs of illness, leading to delayed veterinary care and higher medical costs. The main objective is to develop a smart collar that continuously tracks vital health indicators, such as heart rate and body temperature, providing real-time alerts to owners for early intervention. The solution involves integrating GPS tracking, AI-powered image analysis for skin disease detection, and a user-friendly mobile application for data visualization and tele-veterinary consultations. The project utilizes advanced sensors, AI algorithms, and cloud-based data processing to ensure accurate monitoring and timely insights. The expected outcome is an innovative pet healthcare system that enhances early disease detection, improves veterinary access, and ultimately ensures better overall well- being for pets while offering convenience and peace of mind to their owners.

Supervisor:
Dr. Ahmad Ibrahim Aqeel

Group Members:
- Rahaf Yahya Faloog
- Abrar Ibrahim Zagaan
- Almaha Ali Shami
- Somayh Abbas Ahmed

DEVELOPING AN APPLICATION FOR SIGN LANGUAGE DETECTION



Abstract

This project presents the development of an integrated artificial intelligence–based application for real-time sign language gesture recognition and speech generation. The system combines Convolutional Neural Networks (CNNs) for visual gesture detection and Recurrent Neural Networks (RNNs) for sequential gesture interpretation, enabling accurate conversion of hand movements into spoken output through a smartphone camera. The application processes captured gestures efficiently and produces corresponding speech without requiring manual interaction. Experimental evaluation indicates strong recognition accuracy and reliable speech output, demonstrating the system's potential for practical use in enhancing communication for individuals who rely on sign language.

Supervisor:
Mr. Mohammad Shahid Kamal

Group Members:
- Emal Yahya Hubani
- Nadeen Ali Alnaimi
- Sereen Khalid Saigh
- Athir Abdo Hazzaazi

IMPROVING ACADEMIC PERFORMANCE THROUGH AN E-LEARNING PLATFORM SYSTEM

Abstract

Students often struggle with effectively managing multiple academic tasks, deadlines, and daily schedules. Disorganized approaches to tracking assignments, keeping up with deadlines, and prioritizing responsibilities can lead to missed submissions, increased stress, and reduced academic performance. Traditional methods such as manual planners or isolated calendar apps lack the comprehensive, interactive features that students need to stay on top of their workload in a dynamic and efficient manner. To address these challenges, this project proposes a web-based task management system specifically designed for students. The system allows users to add and update tasks, organize schedules, and receive automated reminders and notifications for due tasks. By leveraging HTML for the front-end, PHP for server-side operations, and a MySQL database for user and task data storage, the platform offers a seamless and centralized solution. This approach aims to streamline task organization, improve time management, and ultimately contribute to students' academic life.

DEVELOPING AND INTEGRATING A COMMUNITY-DRIVEN ASSISTANCE PLATFORM (QAREEBOON) FOR ENHANCING ACCESSIBILITY AND SUPPORT AMONG ELDERLY AND VISUALLY IMPAIRED USERS

Supervisor:
Mr. Mohammad Haseebuddin

Group Members:
- Alhanouf Abdulrahman
- Afnan Munaji
- Amjad Munaji
- Nada Hussein

Abstract

Qareeboon is a community-driven digital platform designed to support elderly and visually impaired individuals by connecting them with nearby volunteers. Users can register as beneficiaries by providing health details such as illnesses, allergies, and medication schedules, while volunteers specify their skills, availability, and location. The platform uses location services (via Google Maps API) to match beneficiaries with the nearest available helpers. It also includes in-app messaging and calling for easy coordination. Overall, Qareeboon focuses on accessibility, safety, and ease of use, aiming to improve quality of life by enabling reliable, community-based assistance and fostering a more inclusive society.

Supervisor:
Dr. Rajan John

Group Members:
- Amira Alfaifi
- Hanadi Alfaifi
- Manar Alfaifi
- Shahad Alfaifi

FRAUD DETECTION IN FINANCIAL TRANSACTIONS

Abstract

This project addresses the growing concern of fraudulent activities in financial transactions by developing a fraud detection system that leverages data mining and machine learning techniques to identify anomalies and suspicious patterns. The system applies pattern recognition, anomaly detection, and predictive analysis to improve the accuracy and efficiency of detecting fraudulent transactions, thereby reducing financial risks for banking and financial institutions. Key findings show that using data mining significantly enhances detection accuracy and minimizes false positives, with real-time detection further mitigating financial threats. The outcome includes a fully functional system, improved fraud detection performance, and a foundation for future advancements in financial security.

Supervisor:
Dr. Shams Tabrez Siddiqui

Group Members:
- Atyaf Khalid Kirtan
- Nahla Yahya Ali

MHARA: A PLATFORM FOR DIRECT KNOWLEDGE EXCHANGE

Abstract

In today's rapidly evolving world, continuous learning and skill development have become essential for personal and professional growth. **Mhara** is an innovative platform designed to facilitate direct knowledge exchange between individuals, allowing users to share expertise in various fields such as languages, finance, technology, and more. Unlike traditional learning platforms, Mhara operates on a mutual skill-sharing model, where users can teach and learn from one another without financial transactions. To ensure the authenticity and reliability of shared knowledge, Mhara incorporates a verification system, requiring users to provide proof of expertise through certifications, work samples, or experience-based assessments. Additionally, a rating and feedback mechanism allows users to evaluate their learning experiences, fostering a trusted and transparent community. The platform is structured around a subscription-based model, where users pay a small annual fee for access, ensuring sustainability and continuous improvements. Future enhancements include group learning sessions, discussion forums, and content moderation features to maintain the quality of exchanges.

Supervisor:
Dr. Hani Alnami

Group Members:
- Rana Ali Alnami
- Shahad Ibrahim Etodi
- Rend Hamad Samaily

Abstract

The **Echo** application is an advanced task management tool designed to improve productivity for individuals and teams. It allows users to create and organize tasks, set personalized reminders, receive real-time notifications, and collaborate efficiently on projects. By leveraging cloud storage and real-time synchronization, Echo ensures seamless access to tasks across multiple devices, enabling users to stay productive anytime and anywhere. The project covers the full development lifecycle, including requirements analysis, feasibility study, system design, implementation, and evaluation. It also addresses technical challenges, security measures, and user experience improvements, resulting in a reliable, secure, and user-friendly platform for effective task management and collaboration.

Supervisor:
Dr. Alhejab Alhazmi

Group Members:

- Tahani Jaber Khubran
- Reem Omar Al Salem
- Taif Zakan
- Noha Ibraheem

A SMART CHIP-BASED APPLICATION FOR DEVICE CONTROL VIA TONGUE MOVEMENTS

TongueNav

Abstract

This project presents a smart assistive system that enables individuals with physical disabilities to control devices using tongue movements. A sensor-equipped smart chip detects movements in four directions and converts them into commands to operate smartphones, tablets, and smart home devices. The system combines C++ (embedded programming), Python (signal processing), and Flutter (mobile interface), ensuring real-time responsiveness and seamless integration with modern devices. It focuses on accessibility, ease of use, and reliability, addressing challenges such as sensor noise and user adaptability. Overall, the solution offers an innovative, hands-free control method that enhances independence, with future potential for AI-based improvements and expanded device support.

Supervisor:
Dr. Alhejab Alhazmi

Group Members:
- Rawan Ahmed Madkhali
- Rahaf Aqeel Jaafari
- Hanin Ali Zaeri
- Amnah Alnashri

COOPERATIVE TRAINING MANAGEMENT PLATFORM (TADRIBI)

تدريبي TADREEBE

Abstract

The **Tadribi** Platform is a web-based solution designed to streamline the process of discovering, applying for, and managing professional training opportunities across Saudi Arabia. By aggregating training programs from various industries and institutions, the platform provides users—ranging from students to job seekers and professionals—with a centralized system to explore relevant skill development opportunities. Through smart recommendation algorithms, users receive personalized training suggestions based on their career interests and preferences. The platform offers real-time application tracking, direct communication with training providers, and a secure authentication system to ensure a seamless and reliable user experience. The system is developed using PHP for back-end services, MySQL for database management, and JavaScript for front-end interactivity, ensuring a robust and scalable infrastructure.

Supervisor:
Dr. Alhejab Alhazmi

Group Members:
- Rahaf Ali
- Rowaida Almalki
- Alanoud Almalki
- Mashael Almalki

BrightPath - AN INTERACTIVE MULTISENSORY LEARNING APP FOR CHILDREN

Abstract

The **BrightPath** Application is an interactive educational tool designed to support early learning for children with developmental delays and autism. It uses engaging audio-visual elements—such as colors, shapes, and images—to teach basic concepts like alphabets, numbers, and simple arithmetic. The app features a user-friendly interface with customizable learning levels, pacing, and reinforcement methods to suit individual needs. Its multi-sensory approach helps improve attention, retention, and engagement. Overall, BrightPath serves as a supportive tool for educators, therapists, and parents, enhancing traditional teaching methods and promoting meaningful, enjoyable learning experiences.

Supervisor:
Dr. Yunus Al Qasim

Group Members:
- Raghad Hussain
- Khlood Yahya
- Rawan Kamli
- Tamadher Hadi

Hadirin APPLICATION

Abstract

The application is an intelligent platform designed to facilitate access to tourism and entertainment events through a single platform. It allows users to discover various activities such as concerts, festivals, cultural performances, and tourist sites. Through the app, users can find details about events, dates, locations, and ticket prices, and even book or purchase tickets directly through the app. The goal of the app is to enhance the user experience by providing updated and easily accessible information.

Supervisor:
Dr. Mohmmed Eltahir

Group Members:
- Asma Yahya Madkhali
- Mays Yahya Fatik
- Ebhar Tariq Salawi
- Reham Ali Albariqi

**THE IMPACT OF USING CHATGPT ON INDIVIDUALS:
A PSYCHOLOGICAL AND BEHAVIORAL ANALYTICAL STUDY**

Abstract

The rapid integration of artificial intelligence into academic environments has significantly altered how students interact with technology. Among the most widely adopted AI tools is ChatGPT, known for its ability to generate human-like responses and assist with various tasks. This study investigates the impact of ChatGPT on university students, with a focus on emotional well-being, social behavior, and the risk of psychological dependency. Using both quantitative surveys and qualitative interviews, data were collected from a sample of university students to analyze usage patterns, emotional responses, and behavioral changes. The findings reveal that while ChatGPT contributes positively to academic performance and stress reduction, excessive use may lead to social withdrawal, anxiety, and reduced critical thinking. The study concludes by offering recommendations to promote responsible use of AI tools in educational settings and highlights the need for future research, particularly within diverse cultural contexts.

Supervisor:
Dr. Alfadil Hamdan

Group Members:
- Aryam Shaddawi
- Khawlh Abdulziz
- Hams Bin Jurais
- Lamis Sharwani

HEALTH MONITORING SYSTEM BASED ON USER INPUT AND SYSTEM RECOMMENDATIONS

Abstract

Many individuals find it challenging to maintain balanced lifestyles due to fragmented health data, lack of structured routines, and limited resources for understanding personal wellness metrics. This often results in inconsistent progress, overlooked health risks, and the absence of personalized guidance to address unique fitness goals. This project proposes a comprehensive web-based system designed to centralize personal health data and offer insightful support. Users can effortlessly log essential health metrics, manage daily routines, and receive automated reminders alongside targeted tips. Technically, the platform is built using HTML for the front-end, PHP (or another server-side language) for back-end logic, and a MySQL database for secure, scalable data storage. By combining a user-friendly interface with data-driven analysis, the system empowers individuals to track their well-being, make informed lifestyle adjustments, and foster sustainable habits for healthier living.

Supervisor:
Mr. Malek Alzoubi

Group Members:
- Mona Abdullah Mobaraky
- Rawan Abdu Shrahili
- Mariamh Mohammed Hdadi
- Amwaj Yaser Musiry

AUTOMATING COOPERATIVE TRAINING FOR IT STUDENTS

Cooperative Training Platform
Jazan University

Abstract

The objective of the project is to develop a website that would provide students with access to cooperative training. HTML, CSS and PHP would be employed to design dynamic, user-centric interfaces for the website, and MySQL would be used for secure and efficient processing of data. The project is aimed at improving the experience of the students with cooperative training and their future career opportunities, by closing the gap between students, businesses, and universities. Apart from being a website where students will be able to browse and apply for training opportunities, the website will also have student profiles where users will be able to update qualification, knowledge, and training interest. The website will also have a platform where universities will be able to post available internship opportunities and communicate with companies that have available internships.

Supervisor:
Dr. Jorair Ahmed

Group Members:
- Fatmah Ahmed
- Manar Mohammed
- Ragad Abdu
- Lama Abdullah

SMART DIABETES CARE: REAL-TIME MONITORING VIA MOBILE APPLICATION

Abstract

This project presents a smart application for diabetes management. The software helps users track health data and receive timely support. It aims to prevent complications and improve daily well-being. The application monitors blood sugar levels. It provides reminders for medication. The tool also tracks physical activity. These features help users maintain their health routines. A central alert system warns users of critical glucose fluctuations. These notifications enable quick action to reduce health risks. The application also connects patients and doctors. Users can send messages and share data directly. An alert system will warn users when blood glucose levels reach critical points, and this prompt notice will guide them to take fast action to reduce health risks. The application will also strengthen patient doctor communication, and this steady contact will support medical supervision and allow treatment adjustments based on current data. The development process will use Flutter for the front-end interface, Dart as the programming language, MySQL for database management, and PHP for back-end functions.

Supervisor:
Dr. Yasir Ahmad

Group Members:
- Haneen Ibrahim
- Nawal Hassan Almalki
- Ruba Mousa Khamaj
- Rahaf Ismael Alharbi

A BI-DIRECTIONAL SAUDI SIGN LANGUAGE TRANSLATION FRAMEWORK USING DEEP LEARNING

Abstract

Saudi Sign Language (SSL) is the primary communication method for many deaf-mute individuals in Saudi Arabia, yet its limited understanding among hearing people creates signicant barriers in education, employment, and social interaction. To address this gap, this project develops a bi-directional SSL translation system implemented as a mobile application, capable of translating static SSL sign images into written text and converting written words into their corresponding SSL images through an internal sign dictionary enhanced with fuzzy string-matching. A labeled dataset of 18 SSL sign classes was used to ne-tune a YOLO-based image classication model via transfer learning, achieving strong performance with a macro F1-score of 0.93, precision close to 1.0, and recall around 0.98 for most classes, with misclassications occurring mainly between visually similar signs. The trained model was integrated into the mobile application through a REST API, enabling real-time interaction where users can capture or select a sign image for immediate textual translation or input a word to retrieve the most relevant SSL sign image. This work demonstrates that combining deep learning with fuzzy matching provides a practical, real-time SSL translation aid tailored to the Saudi context.

INTELLIGENT CONVERSATIONAL AGENT FOR ACADEMIC ASSISTANCE: ENHANCING STUDENT EXPERIENCE THROUGH AI-POWERED CHATBOTS

Supervisor:
Dr. Nadim Rana

Group Members:
- Shatha Ahmad Muaddi
- Razan Fahad Sharahili
- Jamilah Salem Ghazwani
- Salma Faisal Hajjam

Abstract

Many students at Jazan University face delays in academic support due to limited working hours and inflexible systems. Existing chatbots do not fully understand local Arabic dialects or provide personalized assistance. To address this issue, we propose “Nair Jamati”, a bilingual AI chatbot designed to support students in Arabic and English at any time. The chatbot assists with course registration, exam schedules, reminders, and academic inquiries. It uses RASA for task management, AraBERT for natural language understanding, and machine learning to identify students who may need early academic support. The system is hosted on AWS and Heroku, uses Firebase for real-time notifications, and securely stores data in MySQL. Initial results show that the chatbot can improve student experience and reduce administrative workload, with future enhancements planned for broader language support and deeper system integration.

Supervisor:
Ms. Tayyaba Rasheed

Group Members:
- Alhnouf Abdullah
- Nariman Al Shujaa
- Amal Mohammed

PULSE – A HEALTH MONITERING APP FOR ALZHEIMER'S AND CHRONIC DISEASES

Pulse App

Abstract

Pulse is a mobile application designed to support Alzheimer's and chronic disease patients by helping them manage medications, monitor health status, and maintain communication with caregivers and family members. The app incorporates smart reminders, real-time alerts, and location tracking to enhance patient safety and well-being. Featuring a user-friendly interface and Arabic voice command support, Pulse ensures accessibility for elderly users and individuals with disabilities. The project aims to improve healthcare monitoring, alleviate caregiver burdens, and establish a structured communication platform connecting patients, families, and medical professionals. By addressing key challenges such as medication adherence and emergency response, Pulse strives to enhance the quality of life for its users while ensuring data security and privacy.

Supervisor:
Ms. Tayyaba Rasheed

Group Members:
- Afaf Ali
- Fayzah Ahmad
- Wafaa Alharbi
- Bashayr Taher

A WATERMARK AND SMART BARCODE APPROACH FOR PREVENTING EXAM LEAKS

Abstract

This project aims to enhance the security and confidentiality of paper-based exam papers in educational institutions by integrating barcode and watermark technologies. A unique code is assigned to each exam paper, printed directly on the document as a transparent watermark, and serves as a digital identifier for each individual copy. In the event of an exam paper leak, the system enables the precise identification of the source, allowing institutions to take swift and effective action. This technology provides an effective tool for reducing cheating and unauthorized distribution of exam content, especially in environments that rely heavily on paper-based assessments. In addition, the system minimizes human intervention in verification and tracking processes, thereby improving the efficiency and reliability of the examination process.

Supervisor:
Ms. Naziya Parveen

Group Members:
- Asala Ali Mohammed
- Shahad Saeed
- Zohor Rihan Albar
- Rana Bandar Madkhali

COMPREHENSIVE PLATFORM FOR PROPERTY (MASKANUK)

Abstract

The **Maskanuk** Project is a real estate platform designed to simplify property searching in Saudi Arabia by addressing issues of scattered and outdated listings. It provides a centralized source of reliable information, including high-quality property images and detailed descriptions such as room sizes, land area, and available facilities. The platform integrates Google Maps to display accurate property locations, helping users make better location-based decisions. Built using HTML, CSS, JavaScript (front-end), PHP (back-end), and MySQL (database), Maskanuk offers a responsive and efficient solution that enhances the property search experience and supports informed decision-making.

Supervisor:
Ms. Masrath Sulthana

Group Members:
- Rahf Ahmed Hakami
- Amal Essa Ali Shafyi
- Mashael Mohammed
- Norah Mohammed Ali

MY EVENT — A SIMPLE EVENT MANAGEMENT APP

Abstract

My Event is a user-friendly event management application designed to simplify planning and organization of personal events. It offers key features such as event scheduling, task management, reminders, and guest invitations, helping users manage events efficiently. The application uses modern technologies and cloud-based storage to ensure secure data handling, real-time updates, and access across multiple devices. Overall, My Event enhances productivity and accessibility for individuals and small organizations, with future potential for AI-based recommendations, automation, and integration with external services.

Supervisor:
Dr. Aisha Hamdi

Group Members:
- Maryam Mohammed Tumaihi
- Rahaf Ali Zangoti
- Noha Abdulaziz Ageel
- Layali Abdullah Kurshomi

Almusaed Platform — IMPROVING THE QUALITY OF LIFE FOR THE ELDERLY

Abstract

The **Almusaed Platform** is a digital solution designed to enhance the quality of life for elderly individuals in Saudi Arabia by integrating essential services into a single, user-friendly platform. The system addresses challenges related to healthcare access, mobility, social isolation, and daily assistance by leveraging artificial intelligence, data analytics, and secure database management. Almusaed connects elderly users with volunteers, including healthcare professionals and caregivers, through a structured reward system to ensure sustained engagement. Additionally, partnerships with healthcare institutions, government agencies, and private businesses enhance the platform's sustainability. By providing personalized recommendations, secure communication tools, and seamless service integration, Almusaed empowers elderly individuals, promotes independence, and fosters social inclusion.

Supervisor:
Dr. Poonam Bhargav

Group Members:
- Hams Khalid Alhazmi
- Marahib Ali Gharawi
- Suad Abdu Maghfuri
- Shatha Mohammed Maghfuri

AI-DRIVEN MENTAL HEALTH SUPPORT USING NLP AND MACHINE LEARNING TECHNIQUES

Abstract

Mental Health issues such as anxiety and depression are on the rise globally, with Saudi Arabia seeing an increase due to social, economic, and technological changes. Access to psychological support is often hindered by stigma, limited availability of professionals and resource accessibility. This research proposes the development of an AI-driven platform that provides real-time psychological support utilising natural language processing (NLP) and machine learning (ML). The platform will feature an AI-based chatbot capable of analyzing user's emotions and offering personalized guidance in Arabic. Three design approaches will be evaluated: rule-based, retrieval-based and generative-based models. The expected outcome is an efficient, scalable and accessible mental health support system that aligns with Saudi Arabia's Vision 2030 goals of enhancing healthcare services. Integration of Python, and front-end technologies like JavaScript, HTML, CSS and Bootstrap will result in a responsive, interactive anf secure website.

Supervisor:
Dr. Aisha Hamdi

Group Members:
- Waad Bandr Alzahrani
- Alhanouf Mohammed Alhadri
- Nojoud Masoud Alkhaldi
- Joud Ibrahim Zakri

JU SPACE : AN INTERACTIVE PLATFORM DESIGNED TO CONNECT JAZAN UNIVERSITY STUDENTS

Abstract

Jazan University is one of the oldest universities in the Kingdom of Saudi Arabia and provides a variety of services to its students. However, we have identified a need for a dedicated platform to facilitate communication among students. The idea of creating this platform represents a significant step toward enhancing students' educational and social experiences. It aims to provide a user-friendly space where students can communicate through chat, fostering social connections and collaboration while simplifying access to academic materials. Students will be able to share study notes, upload essential files, and exchange previous summaries and slides for collective benefit. This platform is designed to offer comprehensive support to students throughout their academic journey at Jazan University. The proposed system will be developed as an interactive website, featuring a front-end built with HTML and a server-side implementation using PHP. The back-end will be powered by a MySQL database server to manage user accounts and uploaded files.

Supervisor:
Ms. Nedaa Abdulaziz Hadi

Group Members:
- Atheel Jahfali
- Ashwaq Ali Sahari

HEALTHY MEAL RECOMMENDER APPLICATION FOR CALORIE CALCULATION AND PERSONALIZED DAILY MEAL PLANNING

Abstract

This project presents a mobile application developed using Flutter and Firebase that helps users maintain a healthy lifestyle through personalized meal planning. It collects user data (age, weight, height, activity level) to calculate daily calorie needs (TDEE) and generate customized meal plans for all meals. The app tracks calorie intake, nutrients, and user progress while also offering healthy restaurant options and educational resources to improve eating habits. It can optionally integrate with fitness devices for real-time activity tracking. Overall, the application provides a comprehensive, user-friendly solution for weight management and healthy eating, supporting long-term lifestyle improvements.