1. Virtual Reality Tour Platform
   * Objective: Develop a virtual reality platform to provide virtual tours of historical sites, museums, or real estate properties.
   * Technologies: VR software development kits (SDKs), 3D modeling, Unity or Unreal Engine.
   * Outcome: An immersive VR application that allows users to virtually visit and explore locations.
   * Expectations: Students will design interactive VR environments, implement user navigation controls, and ensure a user-friendly experience.
2. Disaster Response Drone Management System
   * Objective: Design a system to coordinate drone operations for delivering essentials and surveying disaster-affected areas.
   * Technologies: GIS, real-time data processing, drone programming.
   * Outcome: A system that optimizes drone routes and improves the efficiency of disaster response efforts.
   * Expectations: Students will integrate live data feeds, create a control dashboard, and simulate drone missions.
3. Movie Ticket Booking System
   * Objective: Create an online booking system for movie tickets with features like seat selection and payment processing.
   * Technologies: Web development (HTML, CSS, JavaScript), backend programming (Node.js, Python), database management.
   * Outcome: A functional website that handles real-time booking, cancellations, and user management.
   * Expectations: Implement a secure login system, an intuitive UI for seat selection, and ensure transaction security.
4. Homework Planner App
   * Objective: Develop an application to help students manage their homework assignments, due dates, and study schedules.
   * Technologies: Mobile app development (iOS/Android), database integration for user data.
   * Outcome: A mobile app that helps students organize their study time and keep track of deadlines.
   * Expectations: Feature set includes calendar integration, notifications, and syncing across multiple devices.
5. Public Transport Navigator
   * Objective: Build an application that provides public transport routes, schedules, and real-time updates.
   * Technologies: API integration, mobile development, GPS and mapping services.
   * Outcome: An app that assists users in planning their public transport travel efficiently.
   * Expectations: Real-time data processing, user-friendly map interfaces, and robust API usage for transit data.
6. Campus Digital Notice Board
   * Objective: Develop a digital notice board for campus-wide announcements, events, and updates.
   * Technologies: Web development, content management systems.
   * Outcome: A centralized platform for disseminating information to the student body.
   * Expectations: Real-time update capabilities, multimedia content support, and accessibility features.
7. Online Tutor Booking System
   * Objective: Create a platform where students can find and book sessions with tutors for various subjects.
   * Technologies: Web development, database management, possibly AI for matching tutors with students.
   * Outcome: A user-friendly platform that facilitates the booking and management of tutoring sessions.
   * Expectations: Features like tutor profiles, ratings systems, and calendar integration.
8. Digital Job Board
   * Objective: Develop a website that allows companies to post job openings and candidates to apply.
   * Technologies: Web development, database systems, secure data handling.
   * Outcome: An operational job board with features like resume upload, job searching, and application management.
   * Expectations: Implement user authentication, data encryption for sensitive information, and an efficient search engine.
9. Sports Team Manager
   * Objective: Build an app that helps manage team rosters, schedules, and game results.
   * Technologies: Mobile development, cloud data synchronization.
   * Outcome: A mobile app that supports team management and provides updates on games and practices.
   * Expectations: Features include schedule management, push notifications for team updates, and data storage.
10. Non-profit Donation Platform
    * Objective: Build a platform to facilitate the donation process for various non-profit organizations.
    * Technologies: Web development, payment gateway integration, secure transactions.
    * Outcome: A secure and efficient platform that enhances donation collection and donor management.
    * Expectations: High level of security, intuitive donation process, and comprehensive admin panel for non-profits.
11. User-Driven Content Platform
    * Objective: Develop a website where users can submit articles, videos, and other content.
    * Technologies: Web development, content moderation tools, multimedia handling.
    * Outcome: A moderated platform that encourages community engagement and content sharing.
    * Expectations: User registration, content upload features, and moderation workflows.
12. Local Farmer's Market App
    * Objective: Develop an app to help local farmers list their produce, and for customers to browse and reserve goods.
    * Technologies: Mobile app development, GPS location services, payment processing.
    * Outcome: A marketplace app that connects farmers with local consumers effectively.
    * Expectations: Real-time inventory updates, location-based services, and secure payment options.
13. Art Gallery Virtual Tour
    * Objective: Create a virtual tour application for art galleries to allow remote viewing of exhibits.
    * Technologies: VR or 360-degree video, web development, interactive design.
    * Outcome: An immersive online experience that simulates a physical visit to an art gallery.
    * Expectations: High-quality visuals, user interaction capabilities, and informational content integration.
14. Community Service Hours Tracker
    * Objective: Develop an application to help students track and verify community service hours.
    * Technologies: Mobile development, database integration.
    * Outcome: A reliable tool for students to log service hours and for organizations to verify them.
    * Expectations: User profiles, real-time logging, and administrative approval processes.
15. Custom T-shirt Design Website
    * Objective: Develop a web application that allows users to design and order custom T-shirts.
    * Technologies: Web development, graphic design tools, e-commerce integration.
    * Outcome: An online platform that facilitates creative T-shirt customization and purchase.
    * Expectations: Interactive design tools, user account management, and secure checkout processes.
16. Interactive Learning Dashboard for Children
    * Objective: Create an educational platform with interactive learning activities for young children.
    * Technologies: Web development, game design principles, educational content creation.
    * Outcome: A fun and engaging learning environment that offers educational games and activities.
    * Expectations: Age-appropriate content, user progress tracking, and parental control features.
17. Local Tourist Attraction App
    * Objective: Build a mobile app that provides information about tourist attractions, restaurants, and events in a specific area.
    * Technologies: Mobile app development, API integration for location services.
    * Outcome: An informative and easy-to-use app that enhances the tourist experience.
    * Expectations: Comprehensive listings, user reviews, and interactive maps.
18. Personalized Learning Assistant
    * Objective: Build an application that offers personalized learning recommendations based on the user's interests and past behavior.
    * Technologies: AI algorithms for personalized suggestions, mobile or web app development.
    * Outcome: A learning assistant that helps users discover educational content and track learning progress.
    * Expectations: Adaptive learning technologies, user engagement metrics, and a friendly user interface.
19. Local Sports Club Management Tool
    * Objective: Develop a tool to help local sports clubs manage memberships, schedules, and event registrations.
    * Technologies: Web or mobile app development, database management.
    * Outcome: A comprehensive management tool that simplifies administrative tasks for sports clubs.
    * Expectations: Member database, event calendar, and communication features.

20. Smart Parking System

* Objective: Develop a smart parking solution that uses sensors and mobile apps to indicate available parking spots on campus.
* Technologies: IoT, mobile app development, cloud services.
* Outcome: A system that reduces time and fuel spent searching for parking spots on campus.
* Expectations: Member database, event calendar, and communication features.
  + Real-Time Availability: Accurately display available parking spots in real-time.
  + Sensor Accuracy: Ensure high accuracy and reliability of IoT sensors.
  + App Functionality: User-friendly mobile app with map integration and directions.
  + System Reliability: Operate consistently with minimal downtime.
  + Response Time: Fast system response time for updates on parking availability.
  + Scalability: Ability to expand and integrate additional functionalities as needed.
  + Ease of Use: Intuitive interfaces accessible to all user skill levels.
  + Accessibility Features: Ensure the app is accessible to users with disabilities.

### IT Capstone Project Milestone Table

| Milestone Number | Milestone Description | Deliverables | Deadline (Week) |
| --- | --- | --- | --- |
| 1 | Project Proposal Submission | Project proposal including scope, objectives, and initial research | Week 2 |
| 2 | Initial Design Review | Preliminary design documents, wireframes, or prototypes | Week 4 |
| 3 | Mid-project Review | Progress report, updated timelines, demo of initial functionalities | Week 6 |
| 4 | Final Design Submission | Complete system design and architecture, finalized UI designs | Week 12 |
| 5 | Beta Version Release | Working beta version of the project for testing | Week 18 |
| 6 | Testing and Quality Assurance | Testing reports, bug lists, performance metrics | Week 19 |
| 7 | Final Project Presentation | Final version of the project, presentation and live demonstration | Week 24 |
| 8 | Project Submission and Documentation | Complete project code, documentation, user manuals, and reflection reports | Week 25-26 |