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Task #1 – Product Failure Analysis

Aim:

To analyze and resolve transaction failures and security vulnerabilities in a mobile payment app, ensuring smooth transactions, enhanced security, and improved user trust.

Context:

Users face transaction failures and security vulnerabilities while making payments. These issues lead to a lack of trust, frequent errors, and frustration among users. To ensure smooth transactions and secure payments, identifying and resolving these problems is essential.

Identify and Fix the Product:

- Conduct surveys with users to identify transaction errors and security concerns.
- Assess essential security features that should be present on the home page.
- Identify UI issues affecting the ease of making transactions.

Explore Features That May Lead to Product Failure:

- Ensure seamless transaction processing.
- Compare similar mobile payment services to identify best security practices.

Feature/Component	Identified Issues	Potential Solutions	User Impact	Implementation Priority
Home Page	No clear access to security settings.	Add quick-access security settings.	Enhances user confidence.	High
	Frequent			
Transaction Process	failures and delays.	Optimize server response times.	Reduces user frustration.	High
Security	Weak encryption methods.	Implement two-factor authentication.	Ensures transaction safety.	High

Result:

By implementing **quick-access security settings, optimizing server response times, and enhancing encryption with two-factor authentication**, the app achieved **faster transactions, improved security, and increased user confidence**, reducing errors and frustration.

Task #2 – Complex Problem Table

Aim:

To identify and justify complex problems across various industries and propose innovative solutions that enhance efficiency, accuracy, and effectiveness in their respective domains.

Topic: Identifying and Justifying Complex Problems in Various Industries

S.No.	Application Domain	Complex Problem Identified	Justification
1	E-commerce Logistics	Inefficient last-mile delivery tracking.	Customers face delays and lost packages due to improper tracking and updates. Implementing AI-powered logistics tracking could improve accuracy.
2	Healthcare	Delayed patient record retrieval in hospitals.	Medical professionals require instant access to patient records for better treatment. A cloud-based database could enhance efficiency.
3	Renewable Energy	Unoptimized solar panel energy distribution.	Uneven energy distribution leads to wastage. AI-driven power grids can enhance energy flow efficiency.

Result:

By analyzing industry-specific challenges such as inefficient logistics tracking, delayed patient record retrieval, and unoptimized energy distribution, appropriate solutions like AI-powered tracking, cloud-based databases, and AI-driven power grids were proposed. These solutions improve operational efficiency, customer satisfaction, and resource optimization across industries.

Task #3 – Product Configurator Flowchart

Aim:

To develop an online Custom Laptop Configurator that allows users to select and customize laptop components based on their preferences, ensuring real-time pricing updates and compatibility checks for an efficient and informed purchasing experience.

Topic: Custom Laptop Configurator

Industry: Consumer Electronics

Type of Configurator: Online build-your-own laptop tool

Problem Solved:

Customers can configure laptops based on their preferences for performance, battery life, and budget. Many users find difficulty in choosing the right specifications and often struggle with comparing multiple configurations. The configurator simplifies the process and provides real-time pricing and compatibility checks.

Flowchart of the Process:

1. User selects the base model.

- 2. Configurator presents customization options (RAM, Storage, Processor, etc.).
- 3. Real-time pricing and compatibility checks are displayed.
- 4. User reviews the selected configuration.
- 5. User proceeds to checkout and payment.
- 6. Confirmation and order processing.

Result:

The configurator simplifies the laptop selection process, helping users easily compare specifications and pricing while ensuring component compatibility. This leads to better customer satisfaction, reduced purchase confusion, and improved sales conversions for the retailer.

Task #4 – User Persona

Aim:

To develop a detailed user persona that helps in understanding the needs, behaviors, and challenges of a software engineer using productivity tools, enabling better tool design and user experience.

Topic: Persona for a Software Engineer Using Productivity Tools

Category	Details
Persona Name	Sneha Verma
Personal Information	Age: 28 Occupation: Software Engineer Location: Pune, India Education: BTech in Computer Science Marital Status: Single Income: ₹12 LPA

Goal and Objectives

Primary Goal: Enhance productivity and work-life balance through efficient work tools. **Objectives:** Improve work efficiency with better tools – Reduce distractions – Optimize workflow automation – Stay updated on emerging tech trends.

Psychographic Information

Interests: AI-driven development, cybersecurity, automation tools.

Choices: Prefers open-source and modular software solutions.

Personality Traits: Analytical, problem-solver, adaptive, prefers structured workflows.

Behavior and Preference

Tech Habits: Heavy use of IDEs, productivity tools, and automation platforms. **Communication Style:** Direct and efficient, prefers concise documentation.

Challenges and Pain Points

Software Compatibility: Issues with cross-platform tools. **Time**

Management: Balancing deep work and meetings. **Security**

Concerns: Keeping data private on cloud platforms.

Result:

A structured user persona that provides insights into user preferences, challenges, and workflow requirements, allowing for the development of targeted solutions that enhance productivity, streamline work processes, and ensure security.

Let me know if you need any refinements!

Task #5 – User Journey Map

Aim:

To create a User Journey Map for an AI-Driven Personal Finance App, outlining the key stages of user interaction, their goals, concerns, and emotional journey to improve user experience and retention.

Topic: User Journey for an AI-Driven Personal Finance App

Stages	Awareness Consideration		Purchase	Retention	Advocacy
Goals & Objectives	Learn about AI-powered financial tools.	Compare AI financial assistants.	Choose a budget-friendly option with strong security.	Actively use the app for expense tracking and savings.	Recommend to peers based on AI-driven insights.
Touch Points	Social media finance blogs, YouTube.	Product reviews, user testimonials, expert opinions.	Online purchase, demo trials.	App notifications, AI-driven insights, customer support.	Social media referrals, community forums.
User Thoughts & Concerns	"Can AI help me save better?"	"How secure is my financial data?"	"Will it fit my budgeting needs?"	"Is it learning my spending habits correctly?" Satisfied	"Should I recommend it to friends?"
Emotions	Curious	Skeptical	Confident		Excited

Result:

A comprehensive **User Journey Map** was successfully developed, mapping user interactions from **awareness to advocacy**. The analysis highlights user concerns such as **data security, AI accuracy, and budgeting efficiency**, addressing them with strategic touchpoints like **social media engagement, expert reviews, AI-driven insights, and customer support**. The findings were documented and shared via **Lucidchart** and a **README.md file on GitHub** for further refinement

Task #6 – Storyboarding

Aim:

To map the user journey for an AI-driven personal finance app, identifying key touchpoints, user concerns, and emotional states at each stage. This helps in optimizing user experience, addressing pain points, and improving engagement.

Topic: Electric Scooters – A Sustainable Urban Transport Solution

1. **Define the Goal:** Provide an eco-friendly, cost-effective, and convenient alternative to urban commuting.
2. **Collect and Synthesize Data:** Urban residents face traffic congestion and rising fuel costs. Many seek affordable, sustainable travel options.
3. **Create Persona and Scenario:**
 - o **Persona:** Rohan, a 30-year-old marketing executive who commutes daily.
 - o **Scenario:** Rohan struggles with long commute times and fuel expenses. He looks for an electric scooter as a solution.
4. **Sketch the Story Steps:**
 - o **Step 1:** Rohan experiences traffic and fuel expenses.
 - o **Step 2:** He researches eco-friendly alternatives.
 - o **Step 3:** He discovers electric scooters and their benefits.
 - o **Step 4:** He visits a dealership and tests a scooter.
 - o **Step 5:** He purchases an electric scooter and enjoys a smoother commute.
 - o **Step 6:** He saves money on fuel and contributes to a greener city.
5. **Add Annotations:** Emotional impact and product benefits.
6. **Iterate and Refine:** Feedback from users.

Result:

A well-defined user journey that highlights the decision-making process, common concerns, and emotional shifts of users. This enables the development team to enhance onboarding, security assurances, and personalized AI-driven insights to improve user satisfaction and advocacy.

Task #7 – Empathy Process Flow

Aim:

To understand user frustrations and emotional responses regarding the setup and remote management of a smart home security system. This will help in designing a more user-friendly solution with enhanced accessibility and automated security features.

Topic: Smart Home Security System

Issue Identified: Users find it difficult to set up and manage security settings remotely.

Proposed Fixes:

- Improve mobile app UI for remote access.
- Add automated security alerts based on user behavior.

Empathy Map:

- **Says:** "Setting up security is confusing."
- **Thinks:** "I need a simpler way to manage my home remotely."
- **Does:** Searches for alternatives, calls customer support.
- **Feels:** Frustrated by complex setup, worried about security.

Next Steps: Implement guided onboarding, AI-based security suggestions.

Result:

A clear roadmap for improving the user experience by simplifying setup, enhancing mobile app usability, and integrating AI-driven security alerts. The implementation of guided onboarding and AI-based suggestions will reduce user frustration and improve adoption rates.

Task #8 – Extempore Activity

Aim:

To explore the role of Information Technology in Smart Cities, Public Healthcare, and Smart Homes by applying the Design Thinking framework. The goal is to identify key challenges, propose IT-driven solutions, and assess their real-world impact.

Topic: IT in Smart Cities, IT in Public Healthcare, and IT in Smart Homes

IT in Smart Cities

1. **Empathize** – Urban populations face issues like traffic congestion, inefficient waste management, and high energy consumption. Citizens and authorities struggle to maintain sustainability and efficiency.
2. **Define** – The main problems include inefficient infrastructure, lack of real-time monitoring, and security concerns.
3. **Ideate** – Solutions like IoT-enabled traffic control, AI-driven energy management, and automated waste disposal can improve urban living.
4. **Prototype** – Cities are deploying smart grids, sensor-based waste bins, and AI traffic monitoring systems.
5. **Test** – Implementing these solutions has led to reduced congestion, better waste recycling, and improved energy efficiency in many cities worldwide.

IT in Public Healthcare

1. **Empathize** – Hospitals face long patient wait times, inefficient medical records management, and difficulty in tracking outbreaks.
2. **Define** – The challenges include a lack of interoperability between health systems, delayed diagnoses, and inefficiencies in resource allocation.
3. **Ideate** – Implementing cloud-based electronic health records, AI-assisted diagnosis, and real-time patient monitoring.
4. **Prototype** – Hospitals and clinics integrate digital health platforms and predictive analytics for disease control.
5. **Test** – Many public healthcare institutions using IT solutions have improved patient care, reduced wait times, and enhanced outbreak tracking.

IT in Smart Homes

1. **Empathize** – Homeowners need secure, energy-efficient, and convenient living spaces but face challenges in automation and security.

2. **Define** – Issues such as high energy consumption, cybersecurity risks, and lack of seamless device integration persist.
3. **Ideate** – Implementing AI-powered home automation, voice-controlled assistants, and blockchain-based security systems.
4. **Prototype** – Smart home platforms integrate IoT, facial recognition security, and automated energy-saving systems.
5. **Test** – Users experience better home security, reduced power bills, and greater convenience through connected home solutions.

Result:

The integration of IT in these domains has led to significant improvements:

- **Smart Cities:** Reduced traffic congestion, better waste management, and optimized energy usage.
 - **Public Healthcare:** Faster patient diagnosis, efficient medical record management, and improved outbreak control.
 - **Smart Homes:** Enhanced security, energy savings, and seamless automation for improved convenience.
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Task #9 – Stakeholder Mapping

Aim:

To identify and categorize key stakeholders involved in the digital transformation of the retail industry. The goal is to understand their roles, responsibilities, and expectations to ensure a smooth transition to digital retail operations.

Topic: Digital Transformation in Retail Industry

Target Audience:

- Retail customers (online and in-store)
- E-commerce users
- Supply chain managers ensuring smooth logistics
- Retail employees adapting to digital workflows

Client (Retail Business/Enterprise):

Businesses aiming to transition from traditional to fully digital operations

Retailers seeking to enhance customer experience and streamline logistics

• Clients expecting AI-driven recommendations, inventory automation, and seamless omnichannel shopping

Manager (Retail Digital Transformation Lead):

- Oversees the end-to-end implementation of digital retail solutions
- Ensures alignment with business objectives and supply chain efficiency
- Coordinates between IT teams, vendors, and marketing teams
- Manages risks and ensures smooth customer adoption

SME (Subject Matter Experts – IT, Retail Management, Cybersecurity):

- **IT Experts** – Develop secure and scalable retail platforms
- **Retail Experts** – Optimize store layouts and digital shopping experiences
- **Cybersecurity Specialists** – Ensure data protection and payment security
- **UX/UI Designers** – Enhance digital storefront usability

Reviewers (Customer Support, Marketing, Quality Assurance):

- **Regulatory Compliance Team** – Ensures retail platforms follow data security laws
- **Quality Assurance Team** – Tests website/app performance and usability
- **Customer Feedback Groups** – Provide insights on shopping experience, needs, and pain points

Result:

- **Clear Stakeholder Roles:** Defined roles for customers, businesses, managers, SMEs, and reviewers, ensuring streamlined collaboration.
 - **Improved Digital Integration:** Retail businesses can effectively implement AI-driven recommendations, inventory automation, and omnichannel experiences.
 - **Enhanced Customer Experience:** Stakeholder alignment leads to a seamless shopping experience, secure transactions, and optimized logistics.
 - **Risk Mitigation:** With cybersecurity and compliance teams involved, businesses can ensure data protection and regulatory adherence.
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Task #10 – Inference Report for E-Learning Management System

Aim:

To analyze and infer key takeaways from the reference article on enhancing e-learning platforms for remote education. The goal is to identify existing challenges, propose innovative solutions, and assess the effectiveness of an AI-driven learning management system (LMS).

Reference Article: Enhancing E-Learning Platforms for Remote Education

1. Empathize

Students and teachers face challenges in online learning, including difficulty in tracking progress, lack of engagement, and limited real-time interaction. These issues often lead to a suboptimal learning experience and reduced educational effectiveness.

2. Define

The primary problem identified is the lack of an adaptive and interactive learning system, which results in:

- Reduced student engagement
- Difficulty in assessing real-time performance
- Inconsistent access to learning materials

3. Ideate

To address these challenges, the study proposes an AI-driven learning management system with the following features:

- **Personalized Learning Paths:** AI-based tracking of student progress to recommend study materials
- **Real-Time Interaction:** Integration of live quizzes, collaborative whiteboards, and chat features
- **Gamification Elements:** Interactive tasks and rewards to enhance engagement

4. Prototype

The prototype developed includes:

- **Student Dashboard:** Tracks learning history, achievements, and recommended materials
- **Live Virtual Classrooms:** Interactive Q&A, real-time feedback, and AI-generated assessments
- **Mobile-Friendly Access:** Responsive design for seamless learning across devices

5. Test

The system underwent comprehensive testing, including:

- **Usability Testing:** Gathering feedback from students and teachers to refine the interface
- **Performance Evaluation:** Ensuring real-time content delivery without delays
- **Security Checks:** Implementing encryption for secure access to course materials and assessments

Result:

The inference highlights the need for adaptive and engaging e-learning experiences. Key findings include:

- **Challenges Identified:** Lack of engagement, difficulty in real-time assessment, and inconsistent access to resources.
 - **Proposed Solutions:** AI-powered personalized learning paths, interactive virtual classrooms, and gamification elements.
Prototype Features: A student dashboard, real-time interaction tools, and mobile-friendly access for seamless learning.
 - **Testing Outcomes:** Usability improvements based on student and teacher feedback, optimized performance for real-time delivery, and security enhancements for protected learning environments.
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Task #11 – Empathy Process Flow

Aim:

To understand user pain points in grocery shopping and develop an AI-powered Smart Grocery Shopping Assistant that enhances shopping efficiency, minimizes overspending, and ensures essential items are not forgotten.

Product Chosen: Smart Grocery Shopping Assistant

Issue Identified:

Many users face challenges in grocery shopping, such as:

- Forgetting to buy essential items
- Overspending due to impulse purchases
- Difficulty in finding the best deals

Proposed Fixes:

- AI-powered shopping lists based on purchase history
- Budget tracking to prevent overspending
- Real-time price comparison for better savings

Empathy Map:

- **Says:** "I always forget something," "Groceries are getting expensive," "I wish I could shop faster."
- **Thinks:** "How can I plan better?" "Are there discounts available?" "I need to avoid unnecessary expenses."
- **Does:** Makes impulse purchases, checks receipts for errors, shops at multiple stores for deals
- **Feels:** Frustrated by disorganization, satisfied when saving money, anxious about exceeding the budget

Result:

- **Enhanced Shopping Organization:** AI-generated shopping lists based on purchase history help users remember essential items.
 - **Better Budget Management:** Real-time budget tracking prevents overspending by providing spending insights.
 - **Cost Savings:** Price comparison features help users find the best deals across multiple stores.
 - **Improved User Experience:** The assistant reduces frustration, enhances convenience, and fosters smarter purchasing habits.
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TASK #12- Seed Catalog App

Aim:

To enhance the seed shopping experience by replacing traditional text-heavy catalogs with a user-friendly, video-based **Seed Catalog App**, making plant information more accessible to all users.

This image appears to be a storyboard illustrating a scenario about a **Seed Catalog App** that uses videos instead of text to help users understand plant information. Here's a breakdown of what's happening in each panel:

1. **Bill struggles to read small print** in a seed catalog at a store.
2. **Frustrated, he leaves without buying seeds.**
3. **At home, he opens the Seed Catalog App** on his phone.
4. **The app shows seed categories** in a user-friendly interface.
5. **Bill selects a plant and watches a video** explaining its details.
6. **Bill is happy** with the experience and finds it easier to choose seeds.

The overall message is that **video-based seed catalogs improve accessibility and user experience**, especially for people who struggle with reading small text.

Do you need help analyzing this further or summarizing it differently?

Result:

- **Improved Accessibility:** Users, especially those with difficulty reading small print, can easily access plant details through videos.
 - **Enhanced User Experience:** A visually engaging interface simplifies navigation and decision-making.
 - **Increased Engagement:** Video content makes learning about seeds more interactive and enjoyable.
 - **Higher Purchase Confidence:** Users feel more informed, leading to better buying decisions and increased customer satisfaction.
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TASK #13- Interaction Design Foundation

Aim:

To provide a structured step-by-step approach for creating UX storyboards, helping designers effectively visualize and communicate user experiences.

The image provides a **Step-by-Step Guide to UX Storyboarding from the Interaction Design Foundation**. It outlines eight key steps:

1. **Define the Goal** – Determine what you want to achieve with the UX storyboard.
2. **Collect and Synthesize Data** – Gather insights from user research, analytics, and feedback.
3. **Choose a Fidelity Level** – Decide on the level of detail (low-fidelity sketches or high-fidelity designs).
4. **Create Persona and Scenario** – Develop user personas and define the context in which they interact with the product.
5. **Sketch the Story Steps** – Visualize the user journey in sequential steps.
6. **Add Annotations** – Provide explanations, emotions, or context for each step.
7. **Present the Storyboard** – Share it with stakeholders to communicate ideas effectively.
8. **Iterate and Refine** – Improve the storyboard based on feedback and testing.

Result:

- **Clear User Journey:** Breaks down interactions into visual steps for better understanding.
- **Improved Stakeholder Communication:** Enhances discussions with teams and clients.
- **Efficient Design Process:** Ensures user-centered design through research and iteration.
- **Better Product Development:** Helps identify pain points and improve usability early on.

TASK #14. Gap Analysis.

Aim:

To conduct a Gap Analysis for a selected product by identifying the differences between its current state and desired future state. The objective is to analyze shortcomings, determine the required improvements, and propose actionable solutions to bridge the gap.

Task Details

- Create a **Gap Analysis** for any product.

Submission Details

1. Create a sample path in the following format:
CourseName - College Name – Batch Number – Task No – Task Name
 - o Example: "CT&DT-ChitkaraUTY-Batch No:5-Task 7- Gap Analysis"
2. Paste the **sharable link** of your **Lucidchart (Gap Analysis)** in a README.md file on **GitHub**.

Result:

A detailed **Gap Analysis** is successfully created using **Lucidchart**, highlighting key gaps and improvement areas in the product. The analysis provides insights into the necessary steps to enhance the product's performance, features, or user experience, helping in strategic decision-making for future development. The final document is shared via a **README.md file on GitHub** with the Lucidchart link.

TASK # 15- Gap Analysis in Design Thinking for a Fitness Tracking App.

Aim:

To conduct a **Gap Analysis using the Design Thinking framework** for a fitness tracking app, identifying issues affecting user engagement and proposing solutions to improve retention.

Background

- A startup is developing a **fitness tracking app** to help users monitor their **physical activity and health**.
- During **user testing**, they observed a **significant drop in user engagement** after the first **two weeks** of app usage.
- To address this issue, they conducted a **Gap Analysis** within the **Design Thinking framework** to identify problems and improve the app.

Current State (As-Is)

Observations:

- Users **abandon** the app after **initial use**.
- Most users log their workouts **inconsistently**.
- Feedback suggests the app feels **repetitive** and lacks **motivational features**.

Key Pain Points Identified:

1. **Limited personalization**.
2. **Lack of rewards or gamification** to keep users engaged.
3. **Complex UI** making tracking **cumbersome**.

Result:

A Gap Analysis was successfully performed, identifying key pain points such as **lack** of personalization, absence of gamification, and a complex UI. The findings help define actionable solutions, including customized workout recommendations, achievement-based rewards, and a more intuitive interface. The insights were documented in a Lucidchart diagram and shared via a README.md file on GitHub for further development.

TASK #16 - Desired State (To-Be) and Identified Gaps for a Fitness Tracking App Gap Analysis.

Aim:

To define the **Desired State (To-Be)** and analyze the **Identified Gaps** in the fitness tracking app using Gap Analysis within the Design Thinking framework. The objective is to establish a strategic roadmap for improving user engagement and retention.

The image presents the **Desired State (To-Be)** and **Identified Gaps** for a **Fitness Tracking App Gap Analysis**.

Desired State (To-Be)

Goals:

- Provide a **personalized and engaging** fitness experience.
- Encourage **consistent app usage** through **motivational features**.
- Simplify the **interface** for effortless activity tracking.

Success Criteria:

- **Increase user retention** by **40% within the first month**.
- **Boost daily active users** by introducing **engaging features**.

Identified Gaps

Category	Current State	Desired State	Gap
Personalization	Generic workout recommendations.	Customizable plans based on user goals.	Lack of tailored experiences.
Motivation	No rewards or gamification features.	Gamified elements like badges and leaderboards.	Users feel unmotivated to return to the app.

Category	Current State	Desired State	Gap
Usability	Overwhelming interface with too many options upfront.	Intuitive, simplified interface with onboarding.	Users struggle to navigate or find relevant features.

Result:

A **Gap Analysis** was successfully conducted, mapping the **current state**, **desired state**, and **existing gaps** in key areas—**personalization, motivation, and usability**. The analysis highlights specific areas for improvement, such as **customized workout plans, gamification elements, and a more intuitive UI**, with measurable success criteria like a **40% increase in user retention**. These insights were visualized in **Lucidchart** and documented in a **README.md file on GitHub** for further development.

TASK #17. The image presents an **Action Plan** for addressing the identified gaps in a **Fitness Tracking App** as part of a **Gap Analysis**.

Aim:

To develop an **Action Plan** for addressing the identified gaps in a **Fitness Tracking App** by implementing solutions that enhance **personalization, motivation, and usability**, ultimately improving user engagement and retention.

Action Plan

Gap	Proposed Solution
Lack of personalization	Introduce AI-driven workout recommendations based on user fitness levels, goals, and past activity data.

Gap	Proposed Solution
Low motivation	Add gamification features like badges, streaks, and leaderboards to reward consistent activity.
Poor usability	Redesign the interface to simplify navigation and include an onboarding tutorial for first-time users.

Prototype and Testing

1. **Simplified user interface** with fewer options displayed initially.
2. A **“Personalized Plan”** feature that adapts dynamically based on user activity.
3. **Gamification elements**, including **streak counters** and **achievement badges**.

Testing Details:

- Conducted with **50 early adopters** over **two weeks**.
- **Feedback was overwhelmingly positive**, especially for **gamified rewards** and **personalized recommendations**.

Result:

An Action Plan was successfully designed, proposing key improvements such as AI-driven workout recommendations, gamification elements, and a streamlined UI. A prototype incorporating these changes was tested with 50 early adopters over two weeks, yielding positive feedback, particularly for gamification features and personalized plans. The findings were documented in Lucidchart and shared via a README.md file on GitHub for further refinement and development.

TASK #18 - Extempore Activity.

Aim:

To deliver a concise and impactful **extempore speech** on the chosen topic (**IT in Automobile / IT in Metro Rail / IT in Avionics**), highlighting the role of information technology in transforming the industry through automation, efficiency, and innovation.

Task Details

Create an **Extempore (short speech or write-up)** on one of the following topics:

- **IT in Automobile**
- **IT in Metro Rail**
- **IT in Avionics**

Submission Details

1. Create a sample path with the following format:
CourseName - College Name – Batch Number – Task No – Task Name
o Example: "CT&DT-ChitkaraUTY-Batch No:5-Task 8-Extempore Activity"
2. Share a **Word file** containing the **extempore** on GitHub.

Result:

A well-structured **extempore speech** was successfully created, discussing key IT applications, real-world advancements, and future prospects in the chosen field. The speech was documented in a **Word file** and uploaded to **GitHub** as per submission guidelines.

TASK #19. The image presents an Extempore Activity on IT in Electric Vehicles, following the Design Thinking Framework:

Aim:

To explore the role of IT in Electric Vehicles (EVs) using the Design Thinking Framework, identifying user challenges and proposing an innovative tech-driven solution to enhance the EV experience.

Activity Name: Powering the Future – IT in Electric Vehicles

Empathize:

EV users struggle with **limited charging infrastructure, range anxiety, and finding optimal charging stations**. They need an **efficient way to manage charging** and optimize vehicle performance.

Define:

The problem is that EV owners need a **smart, intuitive system to locate charging stations, optimize charging times, and monitor battery health in real-time**.

Ideate:

A **mobile app** that:

- Shows **real-time charging station availability**.
- Allows users to **pre-book slots**.
- Integrates with **vehicle diagnostics** for **battery health updates**.

Prototype:

The app would feature:

- A **map with nearby stations**.
- The ability to **reserve a charging slot**.
- **Dynamic pricing** based on **peak times**.
- **Real-time battery health alerts**.

Result:

A structured **extempore speech** was successfully developed, highlighting the **importance of IT in EVs** by addressing **range anxiety, charging infrastructure, and battery management**. The proposed solution—a **smart mobile app**—incorporates **real-time charging station availability, pre-booking, vehicle diagnostics, and dynamic pricing**. The speech was documented in a **Word file** and uploaded to **GitHub** as per submission requirements.

THANK YOU