**Habit Tracker App Phase 2(10 slides)**

**By Mandar Kishore More**

**Slide 1: Title Slide**

* **Title**: Habit Tracker App
* **Subtitle**: Stay Consistent. Stay Motivated.

**Slide 2: Overview**

* **Purpose**: Track daily or weekly habits, analyze completion streaks, and visualize progress.
* **Target Users**: Individuals focused on building consistent habits and personal growth.
* **Tech Stack**: Streamlit (Frontend), SQLite (Database), Python (Backend)

**Slide 3: Core Features**

* Add, view, and delete habits with ease.
* Mark daily/weekly completions.
* Visual habit analytics (graphs and streaks).
* Intuitive user interface built with Streamlit.

**Slide 4: Application Architecture**

* **Frontend**: Streamlit Web Interface
* **Backend**:
  + habit.py: Habit model
  + db.py: SQLite CRUD operations
  + logger.py: Log management
  + analytics.py: Visualization and analytics
* **Database**: habits.db stores habits and completions

**Slide 5: UI Walkthrough**

* **Sidebar**: Navigation menu with date/time, tips, and habit progress bar.
* **Main Sections**:
  + Create Habit
  + View Habits with Graphs
  + Analytics (Streak Insights)
  + Data Table
  + App Info Section

**Slide 6: Analytics and Visualization**

* analytics.py generates:
  + Longest streak insights
  + Bar chart visualizations (via Plotly)
* Completion data grouped by date for clarity
* Helps users stay motivated with performance trends

**Slide 7: Tools & Libraries Used**

* **Python Libraries**:
  + pandas, matplotlib, seaborn
  + plotly, datetime, sqlite3
* **Streamlit**: Fast, interactive UI development
* **Logging**: Built-in logging system for error and action tracking

**Slide 8: Security & Logging**

* logger.py records all database activities
* Organized log files per session
* Ensures transparency and debugging ability

**Slide 9: How to Use the App**

1. Launch the app with streamlit run app.py
2. Create a new habit (daily/weekly)
3. View and mark completions
4. Analyze habit streaks and visualize progress

**Slide 10: Final Notes**

* Open-source and customizable
* Built for consistent growth and easy tracking
* Future scope: reminders, mobile version, authentication
* Thank you for exploring the Habit Tracker!

**Short summary**

This presentation introduces the **Habit Tracker App**, a simple yet powerful tool designed to help users build and maintain positive habits through daily or weekly tracking. Built using **Streamlit** for the user interface and **SQLite** for data storage, the app allows users to create habits, mark completions, view historical progress, and analyze performance with interactive charts.

We’ve structured the system with clean backend modules (db.py, habit.py, analytics.py) and added logging for reliability. Visual insights like streak graphs help users stay motivated. The app is intuitive, portable, and ideal for individuals focused on self-improvement.