Oru agentic AI assignment cheyyaan vendi, simple aaya oru case study base cheythu explain cheyyam. Agentic AI ennu parayumpol, autonomous aayi decisions edukkunna, goals achieve cheyyaan planningum actionum execute cheyyunna AI systems aane. Nammukku oru easy case study edukkaam, athu student-friendly aayirikkum.

Case Study: "Smart Study Planner AI"

Scenario: Oru college studentinu exam preparationinu help cheyyaan oru agentic AI design cheyyananu assignment. Ee AI autonomous aayi studentinte study schedule plan cheyyukayum, tasks prioritize cheyyukayum, progress track cheyyukayum cheyyum.

Assignment Details

Objective: Oru agentic AI system design cheyyananu, athu:

Studentinte available time, subjects, exam dates, difficulty level etc. input aayi edukkum.

Oru optimized study schedule create cheyyum.

Daily tasks assign cheyyukayum, reminders provide cheyyukayum cheyyum.

Studentinte progress track cheythu, schedule adjust cheyyum (eg: oru subject kooduthal time venamenkil).

Steps for Assignment:

Problem Definition:

AI yude goal define cheyyuka: Studentinu effective aayi study cheyyan help cheyyuka.

Inputs list cheyyuka: Exam dates, subject difficulty, available hours per day, studentinte preferences (morning or night study).

Outputs: Daily study schedule, reminders, progress reports.

Agentic AI Features:

Perception: AI studentinte calendar, exam timetable, past performance data etc. analyze cheyyum.

Reasoning: Prioritize subjects based on difficulty and exam proximity. Eg: Tough subjects like Maths nu kooduthal time allocate cheyyum.

Action: Generate cheytha schedule studentinu push notifications or emails aayi send cheyyum.

Learning: Studentinte progress based cheythu schedule tweak cheyyum. Eg: Oru subjectinte revision time kooduthal venamenkil, AI adjust cheyyum.

Simple Algorithm (Pseudo-code):

plaintext

Input: Exam dates, Subject list, Difficulty levels, Available hours

Step 1: Calculate total study hours until exam.

Step 2: Prioritize subjects (Difficulty x Exam proximity).

Step 3: Allocate hours per subject per day.

Step 4: Generate daily schedule with breaks.

Step 5: Send reminders to student.

Step 6: Monitor progress (via quiz scores or completed tasks).

Step 7: Adjust schedule if needed.

Case Study Example:

Student: Anil, B.Tech 2nd year.

Inputs:

Exams: Maths (Dec 10), Physics (Dec 12), Chemistry (Dec 15).

Difficulty: Maths (High), Physics (Medium), Chemistry (Low).

Available: 4 hours/day, prefers evening study.

AI Actions:

Day 1: Maths (2 hours), Physics (1 hour), Chemistry (1 hour).

Sends reminder at 5 PM: "Start Maths revision!"

Tracks Anil’s progress: If Maths quiz score low, allocate extra 30 mins next day.

Deliverables for Assignment:

Oru document with:

AI system description (features, inputs, outputs).

Flowchart or diagram showing AI decision-making process.

Sample schedule for Anil (1 week).

Explanation of how AI adapts to changes (eg: if Anil misses a study session).

Optional: Simple Python/Mockup code for scheduling logic (if programming included).

Why This Case Study?

Simple: Real-world scenario, studentsinu relatable.

Agentic AI Concepts Covered: Perception, reasoning, action, learning.

Customizable: Complexity add cheyyaam (eg: machine learning for better predictions).

Practical: Basic scheduling logic easy aayi implement cheyyaam.

Additional Tips:

Studentsinu flowchart draw cheyyan or simple code (Python/JS) ezhuthaan parayuka.

Example tools: Google Calendar API (for scheduling), Twilio (for reminders).

Encourage creativity: Eg: AI gamify cheyyaam (points for completed tasks).

Ithu oru basic frameworkanu. If you want more details, specific code, or a different case study, let me know!

1.5s