Assignment 1

Task 1

Q1.1:

Question: Explain what kind of system you selected in this assignment and the reasons for your selection.

We selected adaptive learning systems like Quizlet that use AI to break down course material into simpler, interactive formats, adapting to your learning pace and style. We chose this because it directly affects how students and instructors work. Students rely on it to turn dense notes into manageable concepts they can review more easily, while instructors use it to structure lessons and generate supporting material more efficiently.

Q1.2:

Question: Discuss what kind of problem the intelligent system is trying to solve. What makes this problem hard? What are the particular strengths of having an intelligent system rather than a traditional system with deterministic behavior? What are the weaknesses of an intelligent system in this context compared to a traditional system?

Problem the System Solves
Students face difficulties retaining large volumes of material efficiently. Traditional revision methods like static notes, paper flashcards, or fixed quizzes do not adapt to the learner's knowledge state or evolving mastery. Quizlet attempts to solve the **personalization and efficiency problem** in studying by leveraging ML models that predict what a learner knows, forgets, or struggles with, and adjusting review frequency and difficulty accordingly.

Why the Problem Is Hard
Modeling a learner's knowledge state is dynamic and uncertain, one correct answer doesn't prove mastery, and one mistake doesn't prove ignorance. Each student also generates limited data, making reliable adaptation difficult. Learning behaviours vary widely across subjects and individuals, and the real objective (long-term retention) can't be directly measured during use. These factors make personalization a genuinely hard ML problem.

Strengths of an Intelligent System
An ML-based system adapts in real time, prioritizing weak areas instead of following a fixed sequence. It improves from global user patterns, offers varied presentation modes to sustain engagement, and saves time by focusing practice where it matters most, an advantage over deterministic rule-based systems.

Weaknesses Compared to a Traditional System
The logic behind its decisions is often opaque, which can reduce trust. It depends heavily on data quality; sparse or noisy data leads to poor recommendations. The system can also reinforce memorization rather than deep understanding, and its data collection raises privacy or bias concerns.

Task 2

Q2.1:

Question: Explain the different user classes of your target system and other stakeholders of the system

Direct users

1. **Learners (students, professionals, independent users):**
    - **Role:** Create or use flashcards, quizzes, and AI-generated study sets to learn or revise material.
    - **Needs:** Efficient memorization, adaptive review, feedback on progress, and motivation.
    - **Impact of ML:** The quality and accuracy of personalization and recommendations directly affect learning outcomes.
2. **Teachers and Instructors**
    - **Role:** Build or curate study sets, monitor student engagement, and design class activities.
    - **Needs:** Reliable analytics on student performance, control over question quality, integration with curricula.
    - **Impact of ML:** Quality of question generation and adaptive pacing influences teaching effectiveness.
3. **Tutors and content creators**
    - **Role:** Produce and share specialized study sets (often for monetization or public use).
    - **Needs:** Tools for organizing and validating material, visibility to target learners.
    - **Impact of ML:** Ranking and recommendation algorithms determine the reach and visibility of their materials.

Indirect users

- Educational institutions have an interest in how well the system supports learning outcomes, integrates with curricula, and maintains academic integrity.
- Developers and product teams maintain the system, respond to user feedback, and carry responsibility when models behave unpredictably.
- Parents and guardians (for younger learners) monitor progress and care about transparency, safety, and data practices.
- Policymakers and regulators influence requirements around data privacy, algorithmic fairness, and responsible AI use in education.

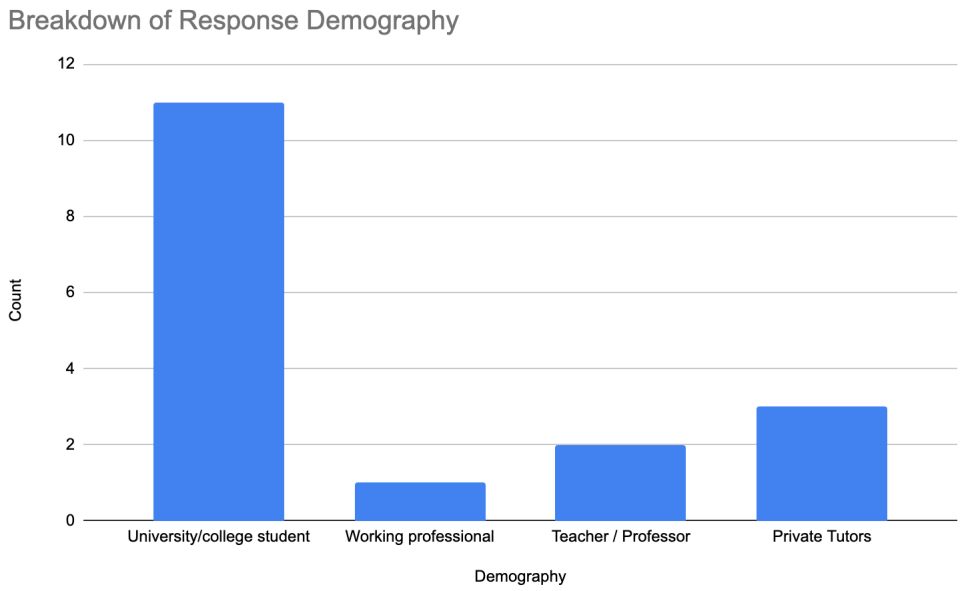
Q2.2:

Question: Perform user research (e.g. interviews and observation studies with real users) to gather information about the target user classes. Describe and provide evidence of your user research process, including the format and artifacts used and its outcome

To understand the needs and painpoint for the users of AI-driven adaptive learning systems, we perform user research using **surveys**. Surveys were chosen for their reach, low participant burden, and ability to capture trends across diverse respondents.

Survey Design
To capture all our direct users, we created 2 surveys - one for learners and the other for instructors, as they have slightly distinct needs and pain-points. We designed the surveys to be anonymous, simple and capture both **quantitative and qualitative insights** by incorporating multiple question formats, including Likert scales, open-ended responses, multi-choice, multi-select, etc. We intentionally avoided collecting personal identifiers and included a brief consent statement at the start of each form. Google Forms was used for distribution due to its support for varied question formats and automatic anonymization. We researched questions that align with the goal user research. Link to survey.

Survey Response Stats.
Total of 16 responses - 12 responses to the learners survey and 4 for the instructor survey.



Analysis
This analysis is based on the collected survey responses. While the sample size is small and not representative of the broader population, the patterns provide useful insights about the

needs, experiences, frustrations, and trust levels of typical users of adaptive learning systems.
Link to Responses

Key Insights

- Students dominate the respondent pool and are the most active users of this system
- Accuracy is the dominant concern across all user classes. Students, professionals, and educators all report low or conditional trust when answers deviate from course content or technical correctness.
- Students need cognitive support (explanations, recall, pacing), while educators need content-generation and planning support.
- Trust increases when the system uses real course material, provides transparent reasoning, or includes correctness checks.
- AI usefulness drops as subject complexity increases, especially in math, history, and higher-level technical domains.
- Motivation tools matter mostly for students, not for educators or professionals.
- Educators show the strongest resistance to inaccuracies, often stating incorrect content is worse than no content.

User Class	Usage Frequency	Primary Needs	Main Pain Points	Trust Level	Experience With AI Tools
Students (n=11)	~80% daily, ~20% weekly	- Accurate explanations - Targeted practice (auto-generated questions) - Long-term retention support - Motivation and pacing tools - Guidance on what to study next	- Inaccuracy / hallucinations - Weak performance in math/advanced subjects - Lack of context about course material - Difficulty staying motivated	~36% trust, ~45% trust sometimes, ~18% do not trust	~80% have used AI (mainly ChatGPT), strong for summaries, weak for technical tasks
Working Professional (n=1)	Occasional	- Clear direction on what to study - Reliable explanations	- Inaccuracy in advanced/technical topics - Over-reliance concerns	Low trust; uses AI only as “hints”	Comfortable with AI, but treats output cautiously

Teachers / Professors (n=2)	Mixed: daily (history), rarely (software engineering)	- Accurate summaries of complex topics - High-quality teaching materials - Adaptation for different learner levels - Insights into student learning patterns	- Accuracy critical (history, math) - Bias in recommendations - Privacy concerns - Risk of lowering teaching standards	Lowest trust; incorrect info seen as harmful	Use AI mainly for lesson planning and creativity support
Private Tutors (n=3)	Daily or weekly	- Automatic question and assignment generation - Student progress tracking - Adapted explanations for different learners - Teaching insights	- Accuracy of AI-generated content - Over-reliance risks - Loss of human creativity	Moderate but cautious trust	Use AI for material creation, explanations, and tutoring support

Q2.3:

After gathering information through the survey, we have created personas and empathy maps for each of the favored user groups which we were able to gather information from the user research surveys. To design the personas, we extracted recurring themes from the survey responses (e.g., accuracy concerns, daily tool usage, desire for adaptive materials). We then synthesised these into archetypes representing each major user class. We used Canva to design the persona layout and selected stock images to avoid personal data collection. Each element; biography, goals, frustrations, behaviours, was mapped directly to specific survey responses, as shown in the empathy maps.

- Student Persona and Empathy Map - Learners

FRENKIE BEUKEMA

PROFILE

Gender : Male
Age : 19
Education : Bachelor's degree
Occupation : Physiotherapy, student
Location : Amsterdam, Netherlands

"I want to help people recover and live pain-free lives while building strong practical skills in therapy."

BIOGRAPHY

Frenkie is a dedicated physical therapy student who values hands-on experience and patient interaction. He's passionate about sports rehabilitation and improving mobility for individuals of all ages. Frenkie enjoys learning through practical sessions and seeks opportunities to apply theory in real-world settings.

BEHAVIOUR CONSIDERATIONS

- Prefers clear, visual instructions and demonstrations
- Motivated by seeing real progress in patients
- Enjoys collaborative learning and team-based projects
- Values tools and resources that simplify complex anatomy concepts

GOALS

- Gain strong clinical skills and confidence in patient care
- Secure an internship at a rehabilitation clinic or sports center
- Build knowledge in anatomy and advanced therapy techniques

FRUSTRATIONS

- Courses that are too theoretical without practical application
- Limited access to real patient cases early in the program
- Overly complicated or outdated learning platforms

TASKS

- Attend lectures and practical labs
- Practice therapy techniques on peers during workshops
- Study anatomy and rehabilitation exercises
- Volunteer at local clinics or sports events

Says

"I want to help people recover and live pain-free lives."

"Hands-on practice is the best way for me to learn."

"I need clear instructions and visual examples."

Thinks

"How can I apply what I learn in real-world situations?"

"I need to build strong practical skills to succeed."

"Internships and clinical experience are key for my career."

Does

Attending lectures and anatomy labs.

Practicing therapy techniques with peers.

Volunteering at clinics or sports events.

Researching rehabilitation methods and exercises.

Feels

Motivated to make a positive impact on patients' lives.

Frustrated when classes are too theoretical.

Excited about opportunities for practical training.

- Working Professional Persona and Empathy Map - Learners

BRENDA SMITH

PROFILE

Gender : Female
Age : 26
Education : Bachelor's degree
Occupation : Investment Banking
Location : East Village, New York

"I'm committed to advancing my career, but I'm always fighting the clock. I need my study time to work as hard as I do."

BIOGRAPHY

Brenda is a junior investment banking analyst working long and unpredictable hours in a fast-paced environment. She is preparing for her CFA Level I exam, but balancing full-time work with structured studying is a major challenge. She relies on digital study tools late at night and during short breaks, for quick explanations, practice questions, and topic summaries.

BEHAVIOUR CONSIDERATIONS

- Uses AI assistants a few times a week to clarify complex finance concepts, preferring interactive formats like flashcards and step-by-step walkthroughs
- Studies in short bursts (commute, breaks, late nights) and needs tools that adapt to an irregular schedule
- Requires high accuracy in formulas, valuation methods, financial math, and regulatory content
- Often fatigued, so she prefers tools that minimise cognitive load and highlight the most relevant material

GOALS

- Pass CFA Level I confidently despite a demanding work schedule
- Strengthen understanding of quantitative methods, financial reporting, and ethics
- Use learning tools that identify weak areas, optimise limited study time and keep her motivated
- Access reliable, concise summaries that match the official curriculum

FRUSTRATIONS

- AI-generated explanations can be inaccurate for advanced finance problems
- Hard to trust generated formulas or valuation steps without verification
- Difficulty knowing what to study next when balancing dozens of CFA topics
- Tools rarely adapt well to fragmented study schedules
- Concerned about data privacy, especially with sensitive work documents
- Overreliance on AI may cause shallow understanding of technical subjects

TASKS

- Preparing for CFA Level I using notes, practice questions, mock exams, and video lectures
- Summarising and understanding complex topics (e.g., derivatives, portfolio management)
- Reviewing financial models and updating valuation spreadsheets
- Preparing pitch decks and market summaries under tight deadlines
- Analyzing company filings, industry reports, and regulatory updates
- Managing long workdays and irregular schedules that limit study time

Says

"I want to advance in my career, but finding time to study is the hardest part."

"I need study sessions that fit around my work schedule, not the other way around."

"Finance is too technical for guesswork, I need precise explanations and correct formulas."

"If a study tool helps me stay consistent and focused, it's worth using."

Thinks

"How can I make real progress when my schedule keeps changing?"

"Am I studying the right topics for the CFA exam, or wasting time on what I already know?"

"AI tools can help, but can I trust them for technical content?"

"A system that adapts to my weak areas could save me hours."

"I need tools that reduce cognitive load, not add to it."

Does

Studies in short bursts: commute, late evenings, lunch breaks

Uses AI assistants to summarise complex topics and clarify formulas

Creates or reviews practice questions for quick recall

Tracks weak areas and tries to optimise limited study time

Works long hours updating valuation models, reviewing filings, and preparing pitch materials

Reorganises study plans whenever work deadlines change

Looks for concise resources that align with CFA curriculum standards

Feels

Pressured to perform at work and stay on track for the CFA

Motivated by long-term career growth and the desire for more stability

Anxious about falling behind or not being exam-ready

Frustrated when tools provide inaccurate or overly simplified technical content

Reassured when a system offers accuracy, curriculum alignment, and personalised pacing

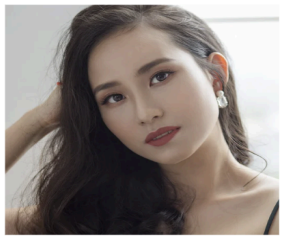
Encouraged when study tools help her stay consistent despite her workload

- Tutors Persona and Empathy Map - Instructors

OLIVIA WILSON

PROFILE

Gender	:	Female
Age	:	25
Education	:	Master's degree
Occupation	:	Private Chemistry Tutor
Location	:	Toronto, Canada



"AI is helpful, but only when I can trust the content. I need credible sources and control over what the system generates."

BIOGRAPHY

Olivia is a dedicated private chemistry tutor who teaches high school and early university students. She offers online tutoring sessions and creates her own instructional materials. She uses digital tools daily for lesson planning, generating practice questions, and tracking student performance. She values tools that save time on preparation and help students engage with challenging chemistry concepts.

BEHAVIOUR CONSIDERATIONS

- Uses AI tools daily for lesson planning and content creation
- Prefers interactive learning (flashcards, quizzes, games)
- Adapts lessons based on student progress and analytics
- Relies on trusted sources and accuracy before giving materials to students

GOALS

- Help students better understand chemistry and pass courses confidently
- Simplify complex topics in ways students enjoy and remember
- Save time by automating worksheets, quizzes, and assignments
- Monitor student learning progress to offer personalized support

FRUSTRATIONS

- AI-generated content can be inaccurate or oversimplified
- Concerned about data privacy and protecting student information
- Worries that students may rely too much on AI instead of learning deeply
- Limited control over how AI decides what to include in study materials

TASKS

- Lesson planning and curriculum design
- Creating quizzes, flashcards, worksheets, and practice exams
- Tracking learner performance and identifying weak areas
- Delivering tutoring sessions online and in-person
- Grading assignments and providing feedback
- Professional development and self-study

Says

"I want to explain complex chemistry topics in simpler ways."

"It's helpful when I can generate practice quizzes quickly."

"Learning progress analytics help me adjust how I teach."

"Students stay motivated when study tools are interactive."

Thinks

"How can I personalize learning for different skill levels?"

"AI tools save time, but I need accurate and reliable content."

"I need credible sources and control over what the AI generates."

"What kind of topics do students struggle with most?"

Does

Uses Quizlet and AI tools daily while preparing lessons

Creates quizzes, flashcards, worksheets, and practice tests

Tracks student progress to identify knowledge gaps

Uses digital tools during tutoring sessions

Does administrative tasks like grading and scheduling

Feels

Motivated to help students succeed and understand difficult topics

Excited when tools automate work and reduce prep time

Frustrated when AI is inaccurate or overly simplified

Concerned about student data privacy and over-reliance on AI

- Professor Persona and Empathy Map - Instructors

DR. DANIEL CHEN

PROFILE

Gender : Male
Age : 41
Education : PhD
Occupation : University Professor
Location : Montréal, Canada

"I'll only trust AI in my teaching when it can guarantee accuracy, respect privacy, and help without taking away my autonomy as an educator."

BIOGRAPHY

Dr. Daniel Chen is a software engineering professor who rarely uses AI tools but is open to them if they improve teaching quality. He wants help simplifying complex topics and understanding student learning patterns, but only with guaranteed accuracy and privacy. He values full control over his course materials and prefers tools that integrate seamlessly into his existing LMS workflow.

BEHAVIOUR CONSIDERATIONS

- Uses digital tools only when necessary; rarely uses AI
- Strong preference for factually accurate, verifiable outputs
- Strong preference for factually accurate, verifiable outputs
- Avoids tools that radically alter his teaching workflow
- Prefers systems integrated into existing platforms (LMS, Google Docs)

GOALS

- Present complex software engineering concepts in a simpler, more digestible form
- Improve clarity and coherence of course materials
- Track which topics students struggle with
- Gain insights into his own teaching patterns and pacing
- Maintain full control over the content used in his courses

FRUSTRATIONS

- AI-generated content is often inaccurate for technical subjects
- Concerns over privacy, data storage, and student information usage
- Fear of losing autonomy and unique teaching identity
- AI recommendations may contain bias or encourage over-reliance
- Lack of integration into existing tools increases friction

TASKS

- Creating lectures, examples, and exercise
- Explaining abstract or advanced concepts
- Delivering lectures and supervising student projects
- Reviewing student performance and understanding
- Adapting course materials for students with different skill levels
- Occasional curriculum updates and self-study

Says

"Accuracy and verifiability matter more than speed."

"If AI supports my teaching, it must respect academic standards."

"I won't adopt a tool unless it protects student data."

"AI should assist, not replace, my professional judgment."

Thinks

"Inaccurate AI explanations can mislead my students."

"Can this system help me simplify complex topics for students?"

"If integrated well, this could genuinely help improve learning."

"Does using AI compromise academic integrity or creativity?"

Does

Designs lectures, assignments, and demonstrations.

Reviews student submissions and identifies conceptual gaps

Occasionally experiments with AI tools but verifies all outputs

Uses LMS platforms (e.g., myCourses, Moodle, Canvas) daily

Ensures compliance with privacy guidelines and institutional policies

Engages in continuous professional development and curriculum refinement

Feels

Responsible for maintaining academic rigor and integrity

Cautious about adopting AI due to concerns about accuracy and bias

Open-minded if the tool demonstrably enhances teaching effectiveness

Frustrated when tools oversimplify nuanced technical material

Reassured when AI offers transparency, citations, and editable outputs

Q2.4:

Question: Create user stories and acceptance tests

We create user stories and acceptance tests for students and professionals for the learners target class, Professors and private tutors for the instructors target class. We create these user stories based on the needs and pain points identified in each persona and empathy maps.

1. Students - learners
    - Personalized Learning Recommendations
      User Story: As a physiotherapy student, I want the system to recommend learning materials based on my progress so that I can focus on what I most need to improve.
      Acceptance Tests: The system analyzes Frenkie's past activity (e.g., completed modules, quiz performance). It recommends at least 3 new items (videos, cases, exercises) tailored to areas he struggled with. Recommendations update after every new quiz or practice session.
    - Clear Visual Explanations for ML Insights
      User Story: As a visual learner, I want the system to explain its predictions with simple visuals so I can easily understand why certain contents are recommended to me..
      Acceptance Tests: Every recommendation includes a visual explanation (e.g., bar chart). Explanations never exceed 3 key factors influencing the suggestion. Frenkie can click "Why am I seeing this?" to view the explanation.
    - Real-World Case Prioritization
      User Story: As a student seeking practical experience, I want the system to prioritize real-world physiotherapy cases so that I can practice applying theory to realistic scenarios.
      Acceptance Tests: At least 50% of recommended content comes from real or simulated patient cases. Cases match Frenkie's selected interests (e.g., sports rehab). When interests change, recommended cases update within 1 session.
    - Adaptive Difficulty
      User Story: As a learner building confidence, I want the system to adjust content difficulty based on how well I'm performing so that I'm neither overwhelmed nor under-challenged.
      Acceptance Tests: If Frenkie scores <60% on a quiz, next recommendations decrease in difficulty. If he scores >85%, recommendations increase in difficulty. Difficulty shifts are reflected within the next 3 recommended items.
    - Efficient, Simple Navigation
      User Story: As a busy student, I want the system to organize content intuitively so that I can quickly find the right material without frustration.
      Acceptance Tests: Frenkie can find a specific topic (e.g., knee mobility rehab) within 3 clicks or less. The interface loads all recommendation panels within 2 seconds.No page contains more than 8 major UI elements, ensuring clarity.

2. Working Professions - learners
    - Adaptive Micro-Sessions for Irregular Schedules
      User Story: As a working professional with unpredictable hours, I want the system to generate short, targeted study sessions so that I can make progress even during limited downtime.
      Acceptance Tests: When Brenda selects “Quick Study,” the system produces a session ≤10 minutes tailored to her weakest areas. The system recalculates her session length and difficulty after every long gap (≥48 hours). Micro-sessions always contain ≤3 items to reduce cognitive load.
    - High-Accuracy Explanations for Technical Finance Topics
      User Story: As a CFA candidate, I want the system to provide accurate, curriculum-aligned explanations so that I can trust the material without constantly verifying it.
      Acceptance Tests: Explanations cite curriculum sections or formulas used (e.g., “NPV formula from CFA Quantitative Methods”). If the system has low confidence, it displays “Verify with official curriculum.” All generated explanations pass an internal accuracy check (<5% error rate).
    - Precision-Based Weak Area Detection
      User Story: As someone with limited study time, I want the system to pinpoint my weakest CFA topics so that I can study only what will meaningfully improve my performance.
      Acceptance Tests: After ≥20 answered questions, the system outputs a ranked list of weak topics (e.g., “Derivatives – 40% accuracy”). Weak-area rankings update within 5 seconds after each quiz. No more than 5 weak topics are shown at once to avoid overload.
    - Fatigue-Aware Study Recommendations
      User Story: As a user often studying late and mentally drained, I want the system to simplify my interface and content when I’m fatigued so that studying remains manageable.
      Acceptance Tests: Sessions after 10 PM automatically switch to “light mode” (shorter sessions, simpler questions). Harder content is deprioritized when Brenda’s recent accuracy drops consistently (>3 declines in a row). The system hides non-essential UI elements when fatigue mode is triggered.
    - Study Planning That Adapts to Workload
      User Story: As a busy analyst balancing long workdays with exam prep, I want my study plan to adjust automatically based on my weekly workload so that I don’t fall behind.
      Acceptance Tests: If Brenda logs <3 study sessions in a week, the system reschedules her plan and shows a “Resume Plan” suggestion. After a high-workload week (detected via missed sessions), the system prioritizes essential topics only. Updated plans generate within 2 seconds when requested.

3. Professors - Instructors
    - Verified, Cited AI Explanations
      User Story: As a professor, I want the system to provide verified and cited explanations so that I can trust the accuracy of the content I share with my students.
      Acceptance Tests: AI-generated explanations include citations or source mappings for each major claim. A “Verify Source” button expands to show the origin of key statements. Explanations with low confidence trigger a “Review Before Using” warning.
    - Automatic Detection of Student Struggle Areas
      User Story: As an instructor, I want the system to automatically detect topics students struggle with so that I can adjust lectures or prepare targeted examples.
      Acceptance Tests: When ≥40% of students score below a threshold on a topic, the system flags it as “Needs Attention.” The system displays a summary of common mistakes. It recommends 2–3 supplementary materials (examples, explanations, practice sets).
    - Difficulty-Tiered Study Material Generation
      User Story: As a professor, I want the system to generate multiple difficulty tiers of study material so that students at different levels can learn effectively.
      Acceptance Tests: From uploaded lecture slides, the system produces Beginner, Intermediate, and Advanced versions. The professor can preview each level before publishing. All generated content remains aligned with the original lecture content.
    - Privacy-Safe Learning Analytics
      User Story: As an instructor responsible for student privacy, I want anonymized analytics so that I can monitor class performance without exposing personal data.
      Acceptance Tests: Analytics dashboards show only aggregated results (no names or identifiers). No individual-level data appears unless explicit consent is provided. Exporting analytics is disabled unless the professor enables it.

4. Private Tutors - Instructors
    - Automatic Quiz & Practice Problem Generation
      User Story: As a private tutor, I want the system to automatically generate quizzes and practice problems so that I can save preparation time and offer more targeted practice for my students.
      Acceptance Tests: When the tutor uploads lesson content, the system generates at least 5 unique practice questions aligned with the material. All questions include answer keys + explanations. Questions flagged as low-confidence are marked “Review before sharing.”
    - Adaptive Questions for Different Student Levels
      User Story: As a private tutor, I want the system to adapt question difficulty to the student’s level so that beginners aren’t overwhelmed and advanced learners stay challenged.

Acceptance Tests: After ≥10 answered questions, the system assigns the student to Beginner, Intermediate, or Advanced level automatically. Generated questions adjust difficulty based on accuracy trends (e.g., <60% → easier). The tutor can manually override the level with one click.

- Learning Analytics for Teaching Insights
  User Story: As a private tutor, I want analytics showing how students engage with my materials so that I can improve my teaching and adjust assignments.
  Acceptance Tests: Analytics dashboard shows time spent, accuracy, and completion rate for each activity. No student-identifying data is exposed without explicit consent (data privacy concern). Engagement insights update within 10 seconds after a student completes an activity.
- Simplification of Complex Topics Into Student-Friendly Explanations
  User Story: As a private tutor, I want the system to simplify complex topics into clear, student-friendly explanations so that learners can understand and stay motivated.
  Acceptance Tests: System generates explanations at three difficulty tiers (simple, standard, advanced). All explanations include verifiable sources or references. If explanation uncertainty is high, the system displays a “Verify content” notice to avoid inaccurate simplification.

Contribution Statement:

All team members contributed to the brainstorming and design of this user research studies. We collectively brainstormed, researched and suggested systems to explore, agreed on surveys as our research tool, brainstormed the survey design and question suggestions. In another session, we analysed the responses, then split the persona creation, empathy maps, user stories and acceptance tests based on experience. We then came together to review each other's created personas and empathy maps ensuring relevance to the survey response, agree on the most relevant user stories per persona and verify the acceptance tests.

Group Member	Tasks Assigned	Comments
Harry	Persona creation, empathy map, user stories & acceptance tests	Focused on the Professor/Instructor use case
Eric	Persona creation, empathy map, user stories & acceptance tests	Focused on the Private Tutor use case
Jess	Student survey design, persona creation, empathy map, user stories & acceptance tests	Focused on the Working Professional use case
Sam	Teacher survey design, persona creation, empathy map, user stories & acceptance tests	Focused on the Student use case
All Members	Report writing, survey analysis, and research design	Collaborated on overall structure and quality assurance