ASSIGNMENT 1 — MODULE I

A. Purpose

To demonstrate the ability to break down a digital system into its smallest functional units, classify features logically, identify missing functions, and produce a deep, multi-layer mind map that will guide navigation and wireframing in later modules.

B. Expected Output

A complete **5-layer functional decomposition map** supported by a **well-structured written document**.
The submission must show:

1. Functional decomposition
2. Hierarchical grouping
3. Missing feature identification
4. Action → Feature mapping
5. Preliminary system-level thinking

C. Assignment Requirements

1. Functional Breakdown

Break the chosen system into:

- Level 1 primary buckets
- Level 2 sub-functions
- Level 3 detailed functions
- Level 4 micro-components
- Level 5 conditional or system-only logic

Minimum node count required: **120 functional nodes**
Minimum layers: **5 layers deep**

2. Mandatory Logic Components

You must include:

- At least **20 system-only operations**
- At least **5 conditional branches**
- At least **10 error states**
- At least **5 exception/edge cases**
- At least **3 backend triggers or automated processes**

3. Missing Feature Identification

Provide a list of at least:

- **15 missing or overlooked features** the average user does not see
- Why each one is necessary
- Which layer it belongs to

4. Action → Feature Mapping

Create a mapping table showing:

- User action
- Resulting feature
- Expected system response

Minimum entries: **30 mappings**

D. Documentation Requirements

Your document must be:

- Well-written, structured, and formatted
- Substantial enough to guide real UX work
- Written in complete sentences and professional tone
- Containing clear reasoning, not just diagrams

Document Structure:

1. Cover Page

- Assignment name
- Module
- Student details
- Date

2. Introduction

A short explanation of:

- What the system is (brief description, without screenshots)
- Why functional decomposition is important
- Scope and boundaries of the chosen system

3. Methodology

Explain:

- How decomposition was approached
- How layers were determined
- How features were categorized
- Tools or frameworks used

4. Functional Decomposition Tree

- Present the full 5-layer tree
- Must be digitally created and readable
- Include all nodes, layers, and relationships

5. Logic Breakdown

Include:

- System-only processes
- Conditional branches
- Error states
- Edge cases
- Backend triggers

Explain each logically and clearly.

6. Action → Feature Mapping Table

A detailed table showing:

- Action
- Trigger
- Destination
- System reaction

7. Missing Feature Analysis

- 15 missing features
- Why they were overlooked
- Why they are essential
- Which layer they belong to

8. Conclusion

- What was learned
- How this decomposition will support navigation design in Module II

9. References (if any)

E. Submission Format

- PDF document only
- Diagrams must be vector or high-resolution
- Maximum file size: 20 MB
- Mind map must be exported clearly (no screenshots of blurred maps)

F. Evaluation Criteria

Criteria	Weight
Depth & accuracy of functional decomposition	35%
Logical grouping & hierarchy	20%
Complexity & completeness of logic components	20%
Quality of documentation	15%
Action → feature mapping clarity	10%