**Customer Journey Map – SmartSDLC**

**Date**: 25 JUNE 2025  
**Team ID**: LTVIP2025TMID31783  
**Project Name**: SmartSDLC  
**Maximum Marks**: 4

**SCENARIO:**

A user (Ritika), a college student working on a software engineering project, explores SmartSDLC to classify her project documents into the correct Software Development Life Cycle (SDLC) phases and receive AI-guided support. She seeks structure, clarity, and reduced confusion in organizing and validating her documentation for academic and practical submission.

**Stage 1 – Awareness**

**Interaction**: Ritika comes across a shared GitHub link or college group post about an AI-based SDLC assistant tool. She opens the SmartSDLC Streamlit site.

**User Goal**:  
*"Help me understand if this tool can assist me in mapping my project documentation to SDLC phases easily and accurately."*

**Positive Experiences**:

* No login required, quick access to the Streamlit interface.
* Clean and straightforward interface with phase names clearly listed.
* A visible example PDF upload area makes intent obvious.

**Negative Experiences / Pain Points**:

* Uncertainty about how the AI is classifying content.
* No explanation of SDLC phases for beginners.

**Opportunities for Improvement**:

* Add a help popup or “What is SDLC?” guide for new users.
* Display an example classification result to guide expectations.

**Stage 2 – Engagement**

**Interaction**: Ritika uploads her project documentation (PDF) and selects the AI classification mode. She clicks "Classify" to start the process.

**User Goal**:  
*"Help me quickly classify this project file into correct SDLC phases and get confidence in my report structure."*

**Positive Experiences**:

* AI returns results phase-wise (like Requirement, Design, Testing) with clear summaries.
* Highlights from the document help her verify why something is categorized into a phase.
* Fast response time due to Gemini API simulation.

**Negative Experiences / Pain Points**:

* If the uploaded PDF has poor formatting or is handwritten, accuracy may decrease.
* No way to adjust or correct phase suggestions manually.

**Opportunities for Improvement**:

* Add a “Confidence Score” for each phase classification.
* Allow drag-and-drop correction or reclassification with user feedback.

**Stage 3 – Insight Generation**

**Interaction**: Ritika explores the dashboard tab where SDLC phase distribution, word clouds, and classification summaries are shown using charts.

**User Goal**:  
*"Give me a clear view of my project’s current SDLC document status and what might be missing or imbalanced."*

**Positive Experiences**:

* Graphs show if her project is missing documentation in phases like ‘Testing’ or ‘Deployment.’
* AI highlights repetitive issues or unclear areas using NLP-based summaries.
* Helpful for refining documentation quality.

**Negative Experiences / Pain Points**:

* No export option to save the analysis.
* AI might miss subtle phase overlaps like ‘Design + Requirement’ unless tuned well.

**Opportunities for Improvement**:

* Export result as PDF or CSV.
* Offer improvement suggestions like "Add more content under Testing Phase."

**Stage 4 – Exploration & Future Action**

**Interaction**: Ritika copies AI suggestions to update her document and revisits the platform with updated versions to re-check.

**User Goal**:  
*"Help me refine and finalize my SDLC documentation before submission or team review."*

**Positive Experiences**:

* Reclassification of updated documents provides better phase alignment.
* Each iteration improves clarity based on prior feedback.

**Negative Experiences / Pain Points**:

* No record of previously uploaded versions or comparisons.
* No collaborative sharing options yet.

**Opportunities for Improvement**:

* Save document versions with timestamps.
* Add a share link feature to collaborate with teammates or mentors.

**Stage 5 – Retention**

**Interaction**: After successful submission, Ritika recommends SmartSDLC to her friends and uses it for her next semester mini-project too.

**User Goal**:  
*"Let me reuse this tool easily for future projects and help others benefit from it too."*

**Positive Experiences**:

* Familiar interface and accurate classification build trust.
* Students begin to use it for quick SDLC alignment checks.

**Negative Experiences / Pain Points**:

* Cannot access past usage history or AI decisions across sessions.

**Opportunities for Improvement**:

* Add user login (optional) to track project progress over time.
* Introduce badges or gamified feedback for completing SDLC classification tasks.

**Summary**

SmartSDLC offers a seamless, AI-guided experience for students and developers to align their project documentation with SDLC phases effectively. From first-time upload to repeated classification and phase-based visual summaries, the tool encourages better software project structure and comprehension. With future enhancements like persistent data storage, collaborative options, and version history, SmartSDLC can become a reliable academic and pre-professional resource.