**Project Initialization and Planning Phase**

| Date | 14 June 2025 |
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| Team ID | xxxxxx |
| Project Name | Early Prediction for Chronic Kidney Disease Detection: A Progressive Approach to Health Management |
| Maximum Marks | 3 Marks |

**Define Problem Statements (Customer Problem Statement Template):**

Identifying Chronic Kidney Disease (CKD) in its first stages may be challenging, particularly in regions with inadequate healthcare services. Doctors may find it challenging to manually examine fragmented or missing lab data, potentially leading to delays or erroneous diagnoses. Individuals exhibiting non-specific symptoms such as fatigue and edema frequently undergo numerous tests without obtaining definitive results, leading to increased anxiety and postponement of therapy. We require a reliable, automated prediction system to aid physicians in making early diagnosis and ensuring patients receive timely medical care.

| **Problem**  **Statement (PS)** | **I am**  **(Customer)** | **I’m trying to** | **But** | **Because** | **Which makes me feel** |
| --- | --- | --- | --- | --- | --- |
| PS-1 | A healthcare professional in a public hospital. | Diagnose chronic kidney disease (CKD) in patients early and accurately. | I don’t have enough time or resources to analyze complex lab reports manually for every patient. | The diagnosis process is often delayed due to missing data, lack of automated tools, and human error. | concerned about patient safety and frustrated with inefficiencies in clinical decision-making. |
| PS-2 | A patient with recurring health issues like fatigue and swelling. | Understand what’s wrong with my health and get proper treatment. | My symptoms are unclear and doctors often need multiple expensive tests for a diagnosis. | Chronic kidney disease develops slowly and is hard to detect in its early stages. | Anxious, confused, and afraid that my condition might worsen before being treated. |