**Ideation Phase**

**Brainstorm & Idea Prioritization Template**

|  |  |
| --- | --- |
| Date | 27 JUNE 2025 |
| Team ID | LTVIP2025TMID35105 |
| Project Name | Revolutionizing Liver Care |
| Maximum Marks | 4 Marks |

**Predicting Liver Care & Idea Prioritization Template:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  | | --- | | **Idea** | | |  | | --- | | **Impact** | | |  | | --- | | **Feasibility** | | |  | | --- | | **Resources Needed** |  |  | | --- | |  | | |  | | --- | | **Timeline** | |
| |  | | --- | | 1. Predict Liver Cirrhosis using medical dataset |  |  | | --- | |  | | |  | | --- | |  | | High – early detection saves lives | | | |  | | --- | | High – data and models available | | |  | | --- | | Public liver datasets, Python, ML libraries |  |  | | --- | |  | | |  | | --- | | 1-2 weeks |  |  | | --- | |  | |
| |  | | --- | | 2. Build a Liver Health Score App | | |  | | --- | | Medium – useful for public health | | |  | | --- | | Medium – UI/UX + backend work | | |  | | --- | | Frontend tech, ML API | | |  | | --- | | 3-4 weeks | |
| |  | | --- | | 3. Detect liver abnormalities using imaging (CT/Ultrasound) | | |  | | --- | |  |  |  | | --- | | Very High – detailed diagnosis | | |  | | --- | | Low – requires complex image data and models | | |  | | --- | | Medical image datasets, CNNs | | |  | | --- | | 5-6 weeks | |
| |  | | --- | | 5. Real-time liver function monitoring with IoT | | |  | | --- | |  |  |  | | --- | | Very High – long-term impact | | |  | | --- | | Low – hardware + complex integration | | |  | | --- | | Sensors, IoT platform | | |  | | --- | | 6+ weeks | |

Reference: <https://www.mural.co/templates/brainstorm-and-idea-prioritization>

**Step-1: Team Gathering, Collaboration and Select the Problem Statement**

## 👥****1. Team Gathering****

### ✅ Roles to Include:

| **Role** | **Responsibility** |
| --- | --- |
| **Team Leader** | Organizes meetings, tracks progress |
| **Data Scientist** | Prepares data, builds models |
| **Developer** | Creates frontend/backend (if app involved) |
| **Researcher** | Understands liver disease domain, collects resources |

## 🤝****2. Collaboration Techniques****

### Tools to Use:

| **Tool** | **Purpose** |
| --- | --- |
| **Google Drive** | Share files and datasets |
| **GitHub** | Collaborate on code |
| **Trello / Notion** | Task management |
| **Google Meet / Zoom** | Weekly team calls |
| **ChatGPT / Kaggle** | Research and guidance |

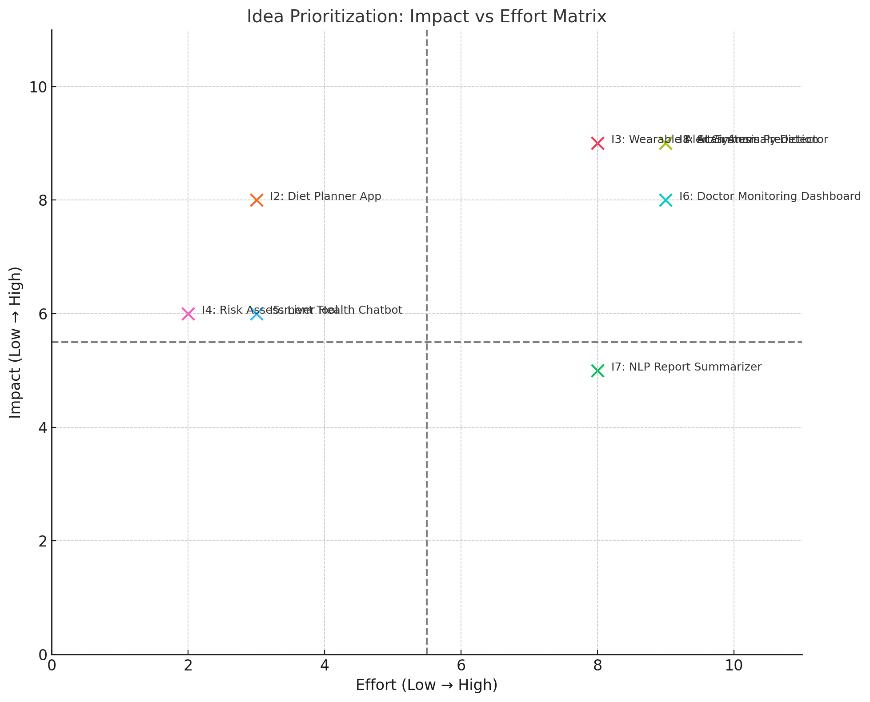
**Step-2: Brainstorm, Idea Listing and Grouping**

**Step-3: Idea Prioritization**

### 🧩 ****Idea Grouping (Clustering)****

Group related ideas together into categories to identify themes.

| **Group** | **Ideas** |
| --- | --- |
| **Prediction & Diagnosis** | I1, I8 – Predicting cirrhosis and detecting anomalies in scans |
| **Monitoring Tools** | I3, I6 – Wearables and dashboards for ongoing patient monitoring |
| **Patient Support** | I2, I5 – Diet planner and chatbot for awareness and daily support |
| **Doctor Tools** | I7, I6 – NLP for reports and doctor dashboards |
| **Awareness & Screening** | I4 – Public tool for liver health risk check-up |

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