

By: startup manager & project manager

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- 1. Requirement Gathering (9 days)**
  - 1.1. Identify project gross and objectives 29th jan - 30th jan
  - 1.2. Identify project stakeholders 31st jan - 1st feb
  - 1.3. Setting up the project infrastructure 2nd feb - 5th feb
  - 1.4. Finalizing project scope 6th feb - 7th feb
- 2. Sprint 1 - Initiating project and design phase (10 days)**
  - 2.1. Planning the scope (1 day)
  - 2.2. Project initiation document (1 day)
  - 2.3. Creating user stories (1 day)
  - 2.4. Estimate effort and assign task to team members (1 day)
  - 2.5. System architecture (1 day)
  - 2.6. UI/UX Wireframe (2 days)
  - 2.7. Design ER diagram (1 day)
    - 2.7.1. Normalisation (1 day)
    - 2.7.2. Create database (1 day)
- 3. Sprint 2 - Implementation of offchain (18 days)**
  - 3.1. Design Institute Login (3 days)
  - 3.2. Implementation of certificate upload management (4 days)
  - 3.3. Design & develop certificate uploads datatables (4 days)
  - 3.4. Design & develop verification system (QR & ID) (5 days)
  - 3.5. Test and validate (2 days)
- 4. Sprint 3 - Implement of Blockchain & IPFS (10 days)**
  - 4.1. Design blockchain structure (2 days)
  - 4.2. Design IPFS structure (2 days)
  - 4.3. Implementation blockchain structure with Harmony Blockchain (2 days)
  - 4.4. Implement IPFS with client server (2 days)
  - 4.5. Synchronizations of IPFS result with Harmony Blockchain (2 day)
- 5. Sprint 4 - Synchronization of offchain, blockchain & IPFS (9 days)**
  - 5.1. Develop offchain connection with blockchain (2 days)
  - 5.2. Implementation of IPFS result with off-chain (2 days)
  - 5.3. Implement real time updates or offchain, blockchain & IPFS (3 days)
  - 5.4. Testing of synchronization with offchain & blockchain (2 day)
- 6. Sprint 5 - Testing and Evaluation (5 days)**
  - 6.1. Code Review (1 day)
  - 6.2. Analyze system for any bugs (1 day)
  - 6.3. Testing certificate uploads for offchain (1 day)
  - 6.4. Debugging certificate validation (1 day)
  - 6.5. Testing real time updates with offchain, blockchain & IPFS (1 day)