SOFTWARE PROJECT MANAGEMENT

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Safe Path Recommender Using News Feeds
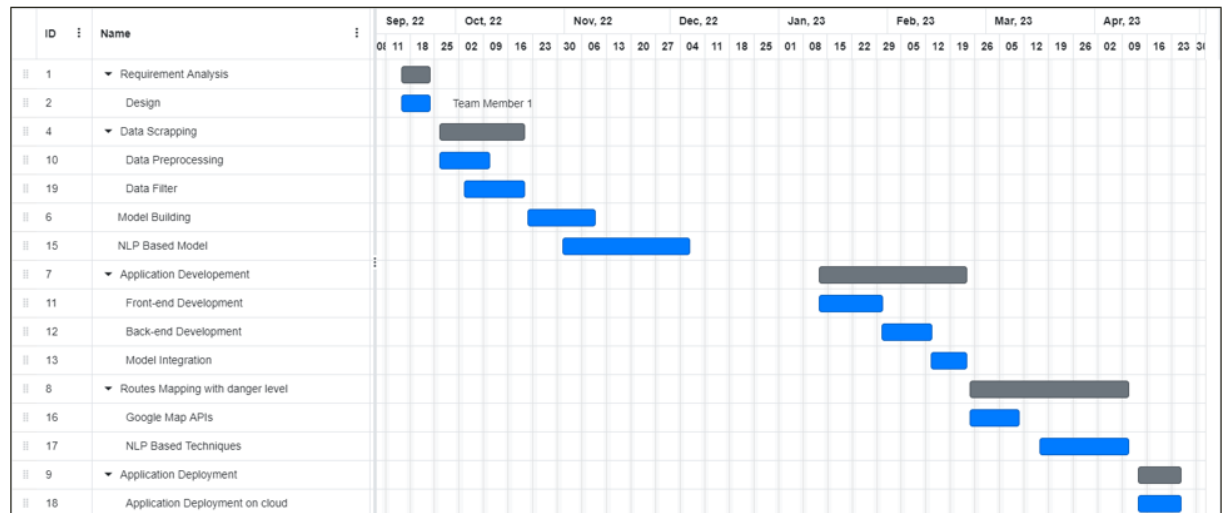
Step-1 Establish project scope and objectives.

1.1 Project Success will depend on the following key factors.

1. **Project Schedule**
   - Project timeframe must be cleared
   - Update Gantt Chart Regularly.

ID	Name	Sep, 22	Oct, 22	Nov, 22	Dec, 22	Jan, 23	Feb, 23	Mar, 23	Apr, 23
1	▼ Requirement Analysis								
2	Design	Team Member 1							
4	▼ Data Scrapping								
10	Data Preprocessing								
19	Data Filter								
6	Model Building								
15	NLP Based Model								
7	▼ Application Developement								
11	Front-end Development								
12	Back-end Development								
13	Model Integration								
8	▼ Routes Mapping with danger level								
16	Google Map APIs								
17	NLP Based Techniques								
9	▼ Application Deployment								
18	Application Deployment on cloud								

   - Miles stones should have fall on the perfect time frame

2. **Project Scope**
   - There will be an application made using flutter which will have NLP algorithms to compute the safe path available using crime rate dataset

3. **Project Budget**
   - We will compare our actual spending to the project's budget (It should be less than the project's budget).

Phases	Project Budget	Actual Spending's
Requirement Analysis	$1500	$1320
Data Scrapping	$500	$300
Application Development	$2000	
Route Mapping	$3500	
Application Deployment	$2500	
TOTAL	$10000	

4. **Stakeholder Satisfaction**
   - Team meetings are being organized.
   - Customers feedback is being recorded through meeting interviews
   - Users requirement feedback is recorded through survey
   - A survey of application working will be created after released

1.2 who is the boss?
Engineer Noman Siddique is the Project Manager of project

1.3 Identify stakeholders?

- Project Manager
- IT Manager
- IT Executive
- Sales Executive
- Finance department
- Marketing Department
- Security Agency
- Government
- Customer
- Developers and Designers
- Business analyst
- SAP Admins

- End Users

1.4 Modify objectives in the light of stakeholder analysis?

Following are collaborative tasks being organize to clarify the objects:

- Encourage Collaboration
- Interviews
- Focus on Selfish Benefits
- Divide and Conquer
- Pre-empt Predictable Objectives
- Get Expected Requirements in front
- Dealing with Risk

1.5 Establish methods of communication with all parties?

- **Interactive communication**
  1. Face to Face meetings
  2. Phone Conversations
  3. Video Conferencing

- **Push Communication**
  1. Emails
  2. Projects Documentation

- **Pull Communication**
  1. Project website or landing page
  2. Project Knowledge base
  3. Project management software

Step 2 Establish project infrastructure.

2.1 Establish a link between the project and any strategic plan?

- **Visions and Goals**

    The Safe path recommender application which will recommend the safe path to user to ensure their safety.

- **The Customer is King**

    This project is purely to benefit the end user so their satisfaction is basic need of project.

2.2 Identify installation standards and procedures?

- **Simple mobile phone**

    A simple smart phone with android or IOS operating system

2.3 Identify project team organization?

- "Engr. Noman Siddique" will work as a Project Manager and Business Analyst.

Role	Names
Project Manager + BA	Noman Siddique
Requirement Analyst	
Design and Architecture	
Construction and Development	
Deployment	

Step 3 Analysis of project characteristics.

3.1 Distinguish the project as either objective or product-based?

It is Product-based project as it will give us product whose details are already cleared.

3.2 Analyse other project characteristics (including quality-based ones)

The project website has characteristics:

- User-Friendly Design
- Mobile-Friendly Features
- User review
- Extensive product information

3.3 Identify high level project risks

RISK	Level	SOLUTION
One route of certain path	Medium	• Suggest to take safety measurement by user
Wrong crime report by user	High	• Login before crime reporting .
Server Downtime	High	• Choose companies with a good reputation (Domain, Hosting, clouding, etc.).

3.3 Select a general life cycle approach?

The waterfall development model will be used to create systematically from one phase to another
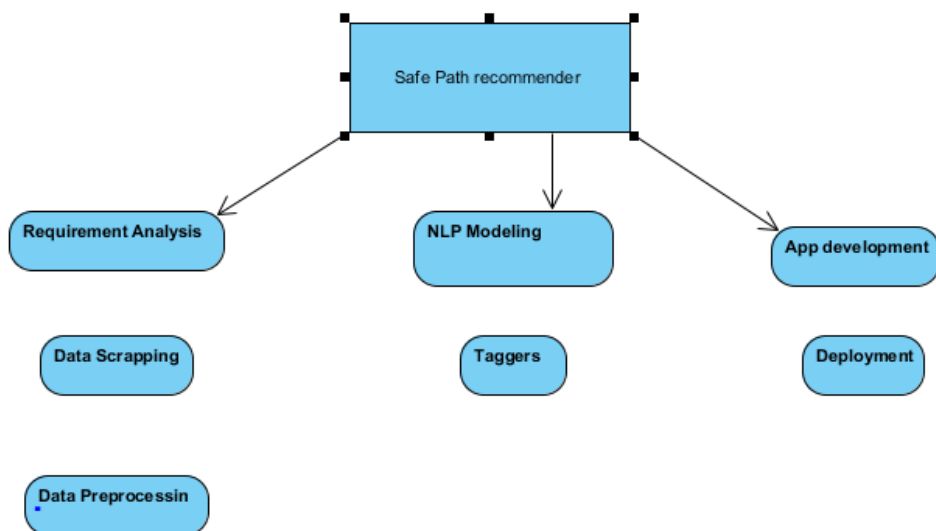
3.4 Review overall resource estimates?

Project is in the estimated budget and time.

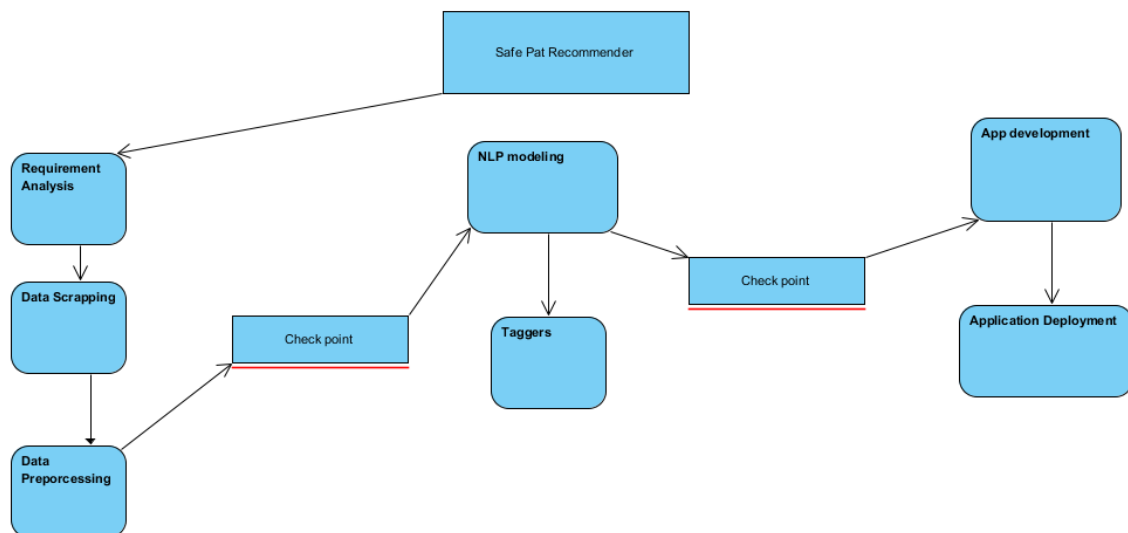# Step 4 Identify project products and activities

4.1 Identify project product and activities

4.2 Document generic product flows

4.3 Recognize product instances

4.5 Add check points

Step-5 Estimate effort for each activity

5.1 Carry out bottom-up estimates

- Estimated any smart phone
- Estimated Time required (1 year approx.).
- Estimated cost ($10000 + $ 5000) Requires.

5.2. Revise the plan to create controllable activities

- Requirement and Data collection

- NLP model implementation
- App development
- Deployment

Step-6 Identify activity risks

6.1. Identify and quantify risks for activities

6.2. Plan risk reduction and contingency Measures

6.3 Adjust overall plans and estimates to take account of risks.

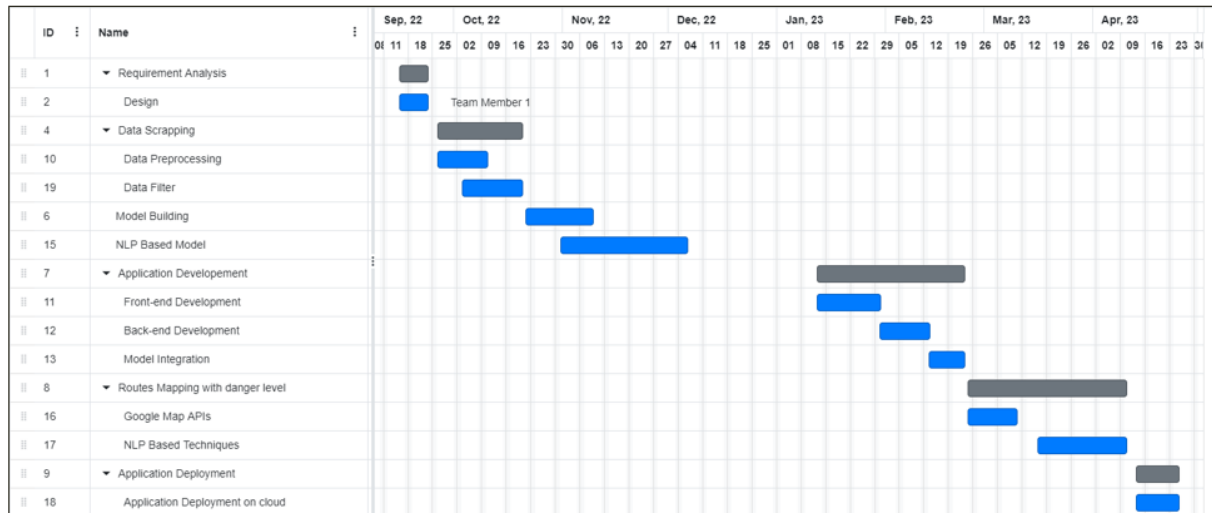| Risk	Impact	Solution
User unfriendly interface	high	• Use of user known symbols and sign • User survey to get to know what they like.
User and functional requirements	High	• Properly planned project. • Prototyping and integration.
Performance	High	• Benchmark and threshold testing.

Step-7 Allocate resources.

7.1 Identify and allocate resources to activities

- Software developers, software engineers, Project managers, Business analysts, efficient hardware, and the latest software required.(Available).
- NLP model designer (Available)
- Project started on 22-Sep-2022 and is due 22-4-2023. (Noted).

7.2 Revise plans and estimates to consider resource constraints

For now, everything is according to plan

7.3 Gantt Chart Ecommerce site:

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Step-8 Review/ publicize the plan

8.1 Review quality aspects of the project plan

Processes for Quality Assurance
This Project will undergo quality measure to ensure any error

E.g. Junit testing, etc.

8.2 Document plan and obtain agreement

- Releasing the final Product
- Final Payments
- Post-Project Evaluations

- Trust and Alignment Effectiveness
- Schedule and Budget Management
- Customer Satisfaction
- Senior Management
- Archiving of Document

Step-9 and step-10 Execute the plan and create lower-level plans.

9. Project Execute Plan?

- **Project Scope:**

There will be an application made using flutter which will have NLP algorithms to compute the safe path available using crime rate dataset

- **Quality Standards:**

The design is very human friendly and will easily use by all the users.

- **Goal Statement:**

The Safe path recommender application which will recommend the safe path to user to ensure their safety.

- **Signoff**

The deliverables will be release for general public.

10. Create lower-level plans

- **Quality Assurance Plan**
- Compatibility across the every platform
- UI / UX Design
- Application Speed

- **Configuration Plan**
- Configure production tools
- Configuring Multiple instances