

**School of Computing**

**SRM IST, Kattankulathur – 603 203**

**Course Code: 18CSC206J**

**Course Name: Software Engineering and Project Management**

| **Experiment No** | 1 |
| --- | --- |
| **Title of Experiment** | To identify the Software Project, Create Business Case, Arrive at a Problem Statement |
| **Name of the candidate** | Alankriti Dadlani |
| **Team Members** | Aritra Karar and Sanjay P |
| **Register Number** | RA2111028010010 |
| **Date of Experiment** | 02.02.2023 |

**Mark Split Up**

| **S.No** | **Description** | **Maximum Mark** | **Mark Obtained** |
| --- | --- | --- | --- |
| 1 | Exercise | 5 |  |
| 2 | Viva | 5 |  |
| **Total** | | **10** |  |

**Staff Signature with date**

**Aim**

To Frame a project team, analyze and identify a Software project. To create a business case and Arrive at a Problem Statement for the <title of the project>

**Team Members:**

| **S. No** | **Register No** | **Name** | **Role** |
| --- | --- | --- | --- |
| **1** | **RA2111028010019** | **Aritra Karar** | **Lead/Rep** |
| **2** | **RA2111028010010** | **Alankriti Dadlani** | **Member** |
| **3** | **RA2111028010012** | **Sanjay P** | **Member** |

**Project Title:** Highway Windmill System

**Project Description**

**SDG goal** used is Affordable and clean energy (goal no.7)

When a car or a vehicle with a certain speed gets past the windmill it starts rotating due to the air current around .

It is a renewable energy source. We can also monitor the energy produced using an app. The installation is a one time process, only requires a windmill which sits on the surface and the dynamo which transfers the energy to the battery sits in an underground unit which makes the dynamo resistant to the weather and hence reduces the maintenance.

The app developed will be able to monitor the energy produced, efficiency and notifies when the maintenance is required. Can also measure the air quality index around the area.

Business Case

<Incorporate the Business Case template>

Result

Thus, the project team formed, the project is described, the business case was prepared and the problem statement was arrived.

**ONE PAGE BUSINESS CASE TEMPLATE**

|  | **DATE** | 02.02.2023 |
| --- | --- | --- |
|  | **SUBMITTED BY** | Alankriti Dadlani, Aritra Karar and Sanjay P. |
|  | **TITLE / ROLE** | Highway Windmill System |
| **THE PROJECT**  In bullet points, describe the problem this project aims to solve or the opportunity it aims to develop. | | | |
| This project aims to generate renewable, clean and an economical source of energy using windmills set up on the dividers of highways/roads. | | | |
| **THE HISTORY**  In bullet points, describe the current situation. | | | |
| * Wind energy is fastest growing source of clean energy * The need for this renewable source of energy is expected to increase rapidly in the near future. * It is a very innovative way of using the energy produced by high speed moving vehicles. | | | |
| **LIMITATIONS**  List what could prevent the success of the project, such as the need for expensive equipment, bad weather, lack of special training, etc. | | | |
| * Occasional fluctuation of wind source * Design Challenges * Transportation of the power generated * Safety Measures | | | |
| **APPROACH**  List what is needed to complete the project. | | | |
| When a car or a vehicle with a certain speed gets past the windmill it starts rotating due to the air current around .  It is a renewable energy source. We can also monitor the energy produced using an app. The installation is a one time process, only requires a windmill which sits on the surface and the dynamo which transfers the energy to the battery sits in an underground unit which makes the dynamo resistant to the weather and hence reduces the maintenance.  The app developed will be able to monitor the energy produced, efficiency and notifies when the maintenance is required. Can also measure the air quality index around the area. | | | |
| **BENEFITS**  In bullet points, list the benefits that this project will bring to the organization. | | | |
| * **Energy production in a feasible way** * **Wind draft created by vehicles on the highway to generate electricity** * **Aims to offsets the e amount of pollution created by burning fossil fuels by introducing a potential source of clean energy** * **excess energy generated could be fed back into the grid or power up the villages nearby** * **The idea is to offset the amount of pollution created by** * **burning fossil fuels by introducing a potential source of clean energy.** | | | |