**HELPFUL TEMPLATE FOR RESEARCH PROPOSAL**

**Student IDs:**

1. **11121185**
2. **180000977**

**Student Name(s):**

1. **Kunal Prakash**
2. **Suraj Dangwal**

**Select a Main Topic**: (A topic related to hot topics of software from the suggested list on Canvas)

**Topic:** Game Development Application for Android Device

**Research Proposal Title (3-15 words):**

Save Electricity: An Educational Game for Children

**Describe the issue/problem/opportunity of the proposal?**

Most children are not aware of the importance of saving electricity. Some of them leave electronics devices powered on even though when they are not using it. When children waste electricity, they do not realise that not only it results to high bills to pay for but also have a negative impact on the environment. The opportunity arises to teach kids at a young age to save electricity which will benefit them in the future and help towards reducing world’s energy consumption as well. Although there can be many ways to teach kids how to save energy, one of the best way to motivate them is by games since it can be both fun and educational.

**Aim and Objectives (1 aim and multiple objectives)**

**Aim:** The aim is to design and develop a motivating game that will teach children the concept of saving electricity.

**Objectives:**

1. Children should be able to navigate through the game easily
2. Conduct research on similar educational games
3. Using simple visual & sound techniques to get the attention of the child
4. Implement simple interface
5. Implement different levels with different scenarios.
6. Implement interactable objects
7. Implement simple tasks for children to perform

**Scope of your research (try to make it narrow):**

Help the children between age group of 4-6 years old to understand the concept of saving electricity.

**What software methodology will be used and why? Resources needed.**

**SDLC – Spiral Model:** Since we are developing a game application for android, we believe that the spiral model from the SDLC is the most appropriate due to its flexibility and interactivity with the game. The resources required are gathering information by researching similar games, unity game development documentations, unity assets, tutorials and discussions with team member and supervisor.

**What research question(s) are you trying to answer (only 1 question?)**

Can we effectively make children understand the concept of saving electricity and make a difference in their life regarding electricity consumption by playing a mobile game?