KHULNA UNIVERSITY

Course Title : Microprocessors and Microcontrollers Laboratory/Project

Course No : CSE 3112

Project Proposal

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Coin-Based Mobile phone Charger Using Arduino

The aim of the project is to install this vending machine type installation to charge mobile phones at a very economical cost. This system charges mobile phones for a particular amount of time on inserting a coin.

Features:

1. It can charge mobile phones for a particular amount of time on inserting a coin.
2. It can charge the mobile phone at any place.
3. It can be used for different types of mobiles.
4. Low power consumption.

Field Objectives:

1. Inserting the coin using a charger for our mobile phones in public places.
2. To reduce the wastage of electrical power which often arises due to negligence of the user.
3. The system can be in rural areas where there are constant power outages.

Feasibility analysis :

The project can be used in the following areas:

Railway station: This type of project is used in the railway station as a public place.

Shop: Coin-based project charger can be installed at any shop to earn money

Rural areas: This project can be installed in rural areas where the power grid is not available at any time.

Public place: This project is very useful when a mobile phone battery dies in public places.

Risk Factors:

- Quite difficult to control voltage for different mobiles.
- It may damage the charger and charging cable.

Instruments:

Hardware:

Arduino UNO, IR Sensor, Coin acceptor, Relay, LCD, Charging connector, Rotary Encoder

Software:

Arduino compiler, Proteus designing software, Embedded c programming.