

A Major Project Report on
**FOOT STEP POWER GENERATION WITH RFID MOBILE
CHARGING STATION**

Submitted to

Jawaharlal Nehru Technological University, Hyderabad

In partial fulfillment of the requirement for the award of degree of

BACHELOR OF TECHNOLOGY

in

ELECTRONICS AND COMMUNICATION ENGINEERING

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2022-2023



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CERTIFICATE

This is to certify that the major project entitled “**FOOT STEP POWER GENERATION WITH RFID MOBILE CHARGING STATION**” submitted to JNTUH is carried out by the following students of IV B.Tech in the partial fulfillment for the award of the degree of Bachelor of Technology in Electronics and Communication Engineering during the academic year 2022-2023.

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ABSTRACT

Day by day, the population of the country is increasing and the requirement of the power is also increasing. At the same time the wastage of energy is also increasing in many ways. So, reforming this energy back to usable form is the major solution. In this footstep power generation project, we are generating power with the help of human's footsteps; this power is then used to charge battery. The power is stored in a battery that can be used to charge a mobile phone using RFID card. This system is powered by at mega 328 microcontroller, it consists of Arduino IDE, RFID sensor, USB cable and LCD. When we power on the system, the system enters into registration mode. We can register three users. Once all the user is entered in the system then the system asks to swipe the card and connect the charger. Initially all the user is given 5 minutes of charging time as default. When we swipe the card and if the user is authorized, the system turns on for charging and will charge the Mobile phone. If the user is un-authorized then the system will display as unauthorized user, just in case if the user wants to stop the charging in midway the user needs to swipe the card again. As soon as the card is swiped again, the remaining time balance is displayed and the charging stops. In order to recharge a card, we need to press recharge button which is on the system, and then system will ask to swipe the card, once the user swipes the card, it adds more 5 minutes to the particular card of the user.



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