# FACULTY OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA PULAU PINANG

## FINAL REPORT: WIRELESS PHONE CHARGER

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### This report is submitted to the Faculty of Electrical Engineering, Universiti Teknologi MARA (UiTM).

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#### **ABSTRACT**

Wireless phone charger is designed to replace the traditional method of power transfer 'using wire' with 'non wire power transfer' which is in theory more efficient, save space and convenient. we have come out with the idea of transfering power or energy to devices without using wire cables as the medium. Induction chargers use an induction coil to create an alternating electromagnetic field from within a charging base, and a second induction coil that we set up at the phone takes power from the electromagnetic field and convert it back into electric current to charge the batteries. The two induction coils in proximity combine to form an electrical transformer. Greater distance between coil can be achieved by using resonant inductive coupling.

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