**A Project Report on**

# "HOMIE"

An Android Application

A project report submitted in fulfillment of the requirement for the 6th Semester 2023 (May) of Bachelor of Computer Application in the session JULY 2020 to JUNE 2023 under Manipur University

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# CERTIFICATE

This is to certify that the project report entitled "**HOMIE – an android app**" submitted to Manipur University in partial fulfilment of the requirement of **BACHELOR OF COMPUTER APPLICATIONS 6th Semester 2023 (May)**, is an original work carried out by **Jotin Hirom 20204 (19530034 of 2019), Jupiter Ningombam 20175 (20570121 of 2020), Johnson Heisnam 20195(20570113 of 2020), Nikhil Khaidem 20205 (20570051 of 2020), Thoungamba Thokchom 20194 (20570112 of 2020), Lourembam Shibraj Meitei 20196 (20570114 of 2020) and Sunand Ngangom 20165 (20570127 of 2020)** under the supervision of **Thongam Bobo.**

The matter embodied in this project is a genuine work done by the student and has not been submitted either to this University or to any other University / Institute for the fulfilment of the requirement of any course of study.

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# ABSTRACT

We live in an exciting time where more and more everyday items “things” are becoming smart! “Things” have sensors and can communicate with other “things” and can provide control to more “things”. The Internet of Things, IoT, is upon us in a huge way and people are rapidly inventing new gadgets that enhance our lives. The price of microcontrollers with the ability to talk over a network keeps dropping and developers can now think and build things inexpensively. This IoT based home automation project is done using low-cost custom build ESP8266 Wi-Fi Module. A system that uses mobile app to control basic home functions and features automatically through internet from anywhere around the world, an automated home is sometimes called a smart home. It is meant to save the electric power and provide better security service. The home automation system differs from other systems by allowing the user to operate the system from anywhere around the world through internet connection without breaking any convention usability. This project provides significant electric power saving solution at homes and at the offices with the help of dynamic control of electric supply over internet using smart switch. Project contains both hardware and software development where hardware program is built using C language on Arduino IDE 2.1.0, whereas mobile application is built using Flutter Framework on VS Code IDE 1.79.2.

# CONTENTS WITH PAGE NUMBER