VIETNAM NATIONAL UNIVERSITY OF HO CHI MINH CITY

THE INTERNATIONAL UNIVERSITY

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

ANDROID PATIENT TRACKING

By

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A proposal for Software Engineering

Ho Chi Minh city, Vietnam

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Introduction

Team profiles:

- Front - End:
    - Phạm Hàng Anh Tuấn – ITITIU18179
    - Nguyễn Võ Hồng Phát – ITITIU18098
    - Phạm Đăng Khoa - ITITIU18276
- Back - End:
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Proposed project description and solution:

Health has always been an important part of our life, yet our traditional approach to patient management has been largely neglected. From its success in the manufacturing industry and businesses, technology is making its way to transform education, traveling and now, hospitals.

Nowadays at some hospitals, doctors still have to manually fill the patient's information and diagnosis with paper and pen. They have to calculate precisely the amount of medicine needed until the patient’s next visit. And about scheduling the next visit, the patient has no choice but to skip their personal meetings to follow the dates. Doctors may unexpectedly be busy for some day and have almost no patients the next day.

In this project, our group seeks to solve these problems and unburden doctors from the tedious matter of traditional methods. Many similar systems are implemented on the web

platform and used on PCs by doctors, they require large maintenance costs and Windows is undoubtedly very susceptible to attacks over the Internet. Therefore, we proposed a new Patient Tracker app implemented on mobile platforms, specifically Android because of its dominant popularity over the smartphone market.

Our solution includes a cross-platform mobile app implemented with React Native used by doctors at the hospital and a backend server implemented with Express framework along with PostgreSQL database management system.

Schedule

1. Functionality
    - Organize patient's appointments
    - Store and retrieve patient's information
    - Enter new medical record
2. Success criteria
    - An easy-to-use Android app for doctors
    - Deployable backend on Heroku platform
    - Patients and doctors information are secured
    - Fully tested and maintainable code at every sprint
3. Plan

Duration	Description of tasks	Members
Week 1	Team structure discussion, topic research	All members
Week 2	Environment setup guide Front-end Design Back-end Design Writing proposal and plan	Phat Kha and Khoa Quan and Son Chien and Tuan
Week 3	Specific task plan for DB development and UI Client	All members
Week 4	Develop DB Design UI Client	Kha, Khoa, Tuan, Phat Chien, Quan, Son

Week 5	DB development UI Client	Kha, Khoa, Tuan, Phat Chien, Quan, Son
Week 6	DB development UI Client	Kha, Khoa, Tuan, Phat Chien, Quan, Son
Week 7	Update/Delete DB Modify UX/UI	Kha, Khoa, Tuan, Phat Chien, Quan, Son
Week 8	Testing, additional feature discussion	All members
Week 9	Update/Delete DB Modify UI	Kha, Khoa, Tuan, Phat Chien, Quan, Son
Week 10	Final Testing Writing final report	All members