

Background and Motivation

It has been more than a year since COVID-19 has been declared a pandemic. 185 million people have been infected with the death of 4 million people and the number continues to rise every day. The pandemic has both direct and indirect effects on every aspect of our life includes SDGs goals. According to the UN, it pushed 71 million people into extreme poverty and could reverse decades of improvement in healthcare. Education has faced a struggle due to the school closure and remote education is still out of reach for at least 500 million students around the world.

The only option to end this pandemic is to achieve herd immunity. If enough people could develop the immunity of the Coronavirus, the spreading of the virus could stop and mark the end of the pandemic. The fastest and easiest way for people to develop immunity is through vaccination. Many medical companies had developed various types of COVID-19 vaccine which should be able to help people develop immunity and prevent death.

In Thailand, the government launches the application Mhor-Prompt (หมอพร้อม) to the public. Its purpose is to allow Thai people to appoint the COVID-19 vaccination. On May 31, 2021, it stops receiving the appointment in the application and transfer its duty to the local authority. After that, each province that has the authority to allocate the vaccine to their people also need to develop their application to let people make an appointment. It turned out to confuse many people. This is a problem that we want to solve. Building a good mobile application that works as a centralized vaccination appointment system with a good user experience that Mhor-Prompt tried to be.

Problem

People want to get COVID-19 vaccination as fast as possible, but the existing solution would not allow them to. It is hard to use for many people and has a poorly designed user experience.

Target SDGs

SDG3 Ensure healthy lives and promote well-being for all at all ages.

Solution

Mobile application that allows users to make COVID-19 vaccination appointments with a good user experience.

How can the application benefit SDG3?

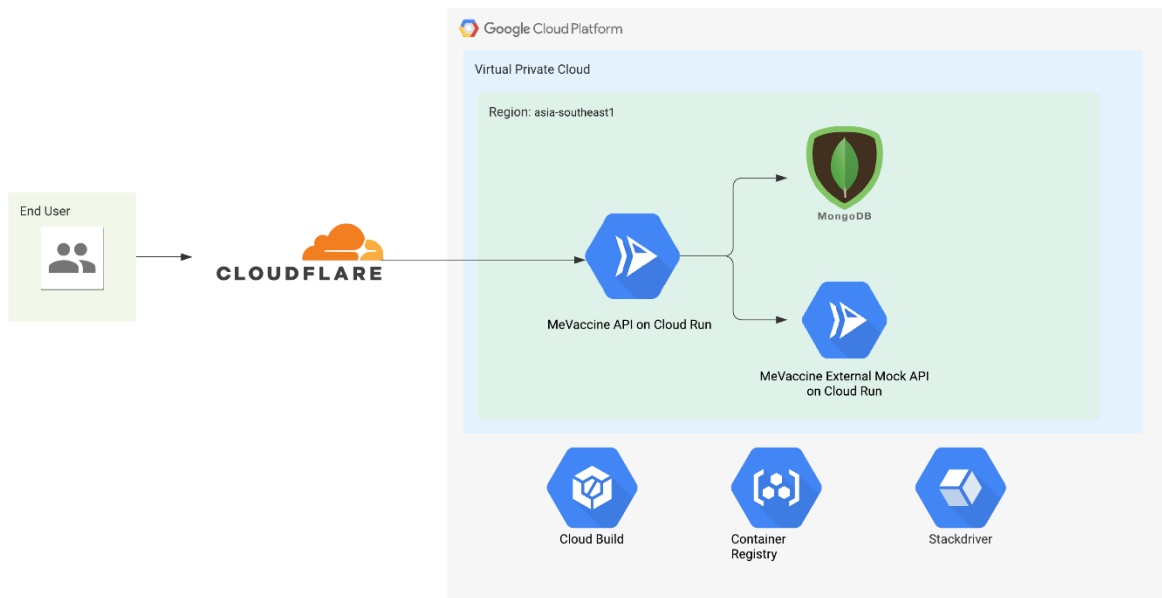
As we mentioned before, the pandemic effect on every aspect of our life, especially in healthcare. It has interrupted childhood immunization programs in around 70 countries and hundreds of thousands of additional under-5 death are expected in 2020. Since vaccination is the only way out of this pandemic. An application that cooperates with the government that would allow the user to get vaccinated as soon as possible would benefit the overall healthcare system.

Related Project and Product

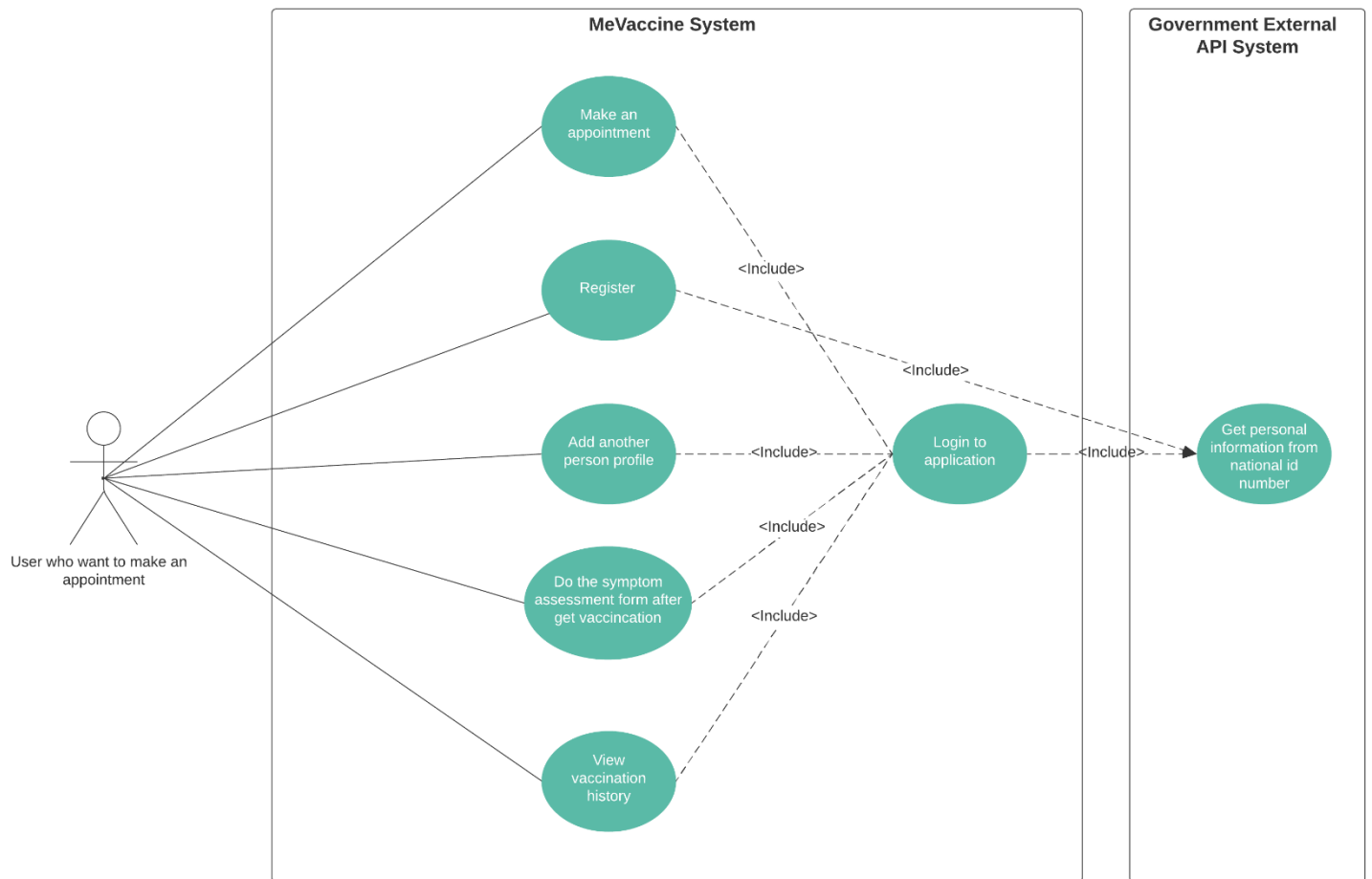
Mo Prom is the application appointment of vaccinating of Covid-19. It helps the user to register an appointment to getting a vaccine from the COVID-19 situation. It allows users to select a hospital and chooses the time to the appointment. After your vaccination complete it will keep a record of your vaccination in the system of vaccinating.

Software/Feature	Vaccination Appointment	Adding people to get vaccination together	Good user experience	Symptom Assessment Form
MeVaccine	✓	✓	✓	✓
Mo Prom	✓	X	X	✓

System Architecture



Use case diagram



Project Achievements

1. We can analyze the flaw with the UX/UI of Mhor-Prompt by using UI theory and design principles learned in CSC234 User-Centric Mobile Application.
2. We can apply UX/UI theory and design principles from the CSC234 User-Centric Mobile Application class to design a user-friendly mobile application.
3. We can develop a mobile application with Flutter Framework and Dart from the knowledge from CSC234 User-Centric Mobile Application.
4. We can develop a REST API backend as learned in CSC105 Web Application Development.
5. We can evaluate and compare production deployment methods and CI/CD pipeline services for our API backend.
6. We can justify the benefit and downsides of using NoSQL and Relational Database for this project and select what is suitable as learned in the CSC218 Database System.