CoronaCare

Overview

- Our application is a healthcare platform specifically helping people with coronavirus symptoms.
- Our customers are people with coronavirus symptoms, who can potentially be positive for the virus.
- The result of our service is taking care of people who tested positive for the virus and following the steps of the protocol for treating infected patients, which include getting tested, getting the results and the doctor’s report, but also notifying the government to contact people who the person has been in contact with.

Task structure, handled exception

- Government server (Contacts list, Notify contacts)
- Doctor report
- Lab results
- Medical Form
- Fill close contacts form/ Patient reviews the system
- Patient Pre-screening
- Patient Request Evaluation
- Medical team visit
- Connecting services, Deployment, PKIs tracking

Exception:

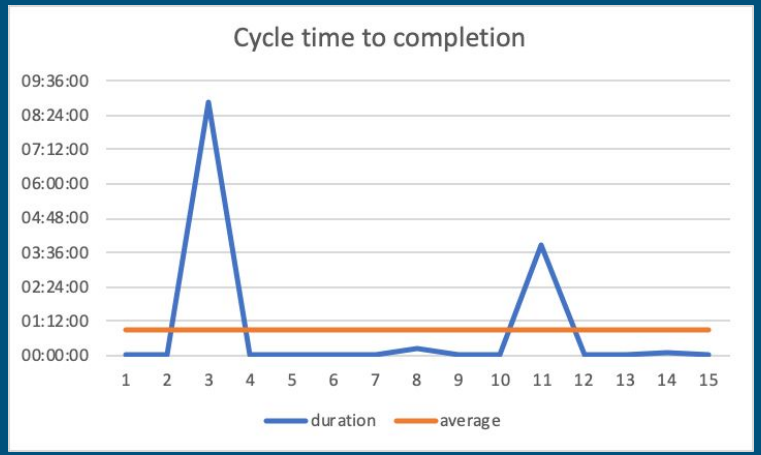
Since the number of infected people can be really high, we could face shortage of test kits, delays of getting the lab results and low number of doctors available. The platform could go down, due to the high number of people reaching it.

Implementation details, tools, server, programming language

- Programming languages:
  - Python (Flask),
  - Angular 8,
  - HTML
  - CSS
  - Javascript
  - SQLite
  - BPMN
- Implementation
  - Healthcare server (central server + sqlite database with KPIs)
  - Lab server
  - Government server
  - Interface for patient (web server)
  - Interface for doctor (web server)
- Server: AWS; deployed services to multiple ports (servers)

Evaluation of KPIs, possible improvements

- 33 Students - 9 positive, 24 negative results
- The average of feedback is 4.53 (5 excellent, 1 very poor)
- The average cycle time to completion is 53 minutes and 13 seconds



Feedback and Failures

- Understanding the tasks
- Lack of technical expertise
- Problem with Camunda
- It takes a lot of time to get all necessary access
- Monitoring
- The firewall blocks any external connection to the server
- Missing Review Task in BPMN model

Thank you!