

Software Engineering

Assignment – 3

Group – 8

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COVID SELF CARE APPLICATION

Software maintenance:

- 1) The previous software system cannot store the data of the symptoms for each user after they fill in the set of COVID questionnaires. Therefore, we fix the code to store their health information in a csv file.
- 2) We also beautify the GUI of the software system by adding some background images.
- 3) Adding Logout button to make the software application more user friendly.

Feature extension:

Quantify each symptom from zero to three based on their relevance to COVID-19. The quantification of each symptom is shown as below:

- Fever, Cold, Headache, Breath: 3 points
- Cough, Body pain: 2 points
- Vomit: 1 point

After filling in the self-assessment questionnaire, the system will sum up your symptom as a risk index. Based on the risk index, the system will classify the user to three groups:

- 1) If $\text{risk index} \geq 10$, the user will be classified in a high-risk level and the system will advise the user to call 112 if your condition get worse after a few hours.
- 2) If $5 \leq \text{risk index} < 10$, the user will be classified in a middle-risk level and the system will advise the user to self-quarantine.
- 3) If $1 \leq \text{risk index} < 5$, the user will be classified in a low-risk group and the system will advise the user to drink more water and take rest!
- 4) If $\text{risk index} = 0$, the user will be classified in a no-risk group.