6COSC023W – Final Project Report

SLEEPLINE

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Abstract

Sleep is essential for all human beings to function during the day. Getting a good night's sleep is what may keep one up and running throughout the day. However, due to certain discrepancies, most people find it difficult to fall asleep at night. The inability to get constant sleep, stay asleep or wake up in between is diagnosed as insomnia. Whilst the causes of Insomnia may differ from one case to another, the common causes are identified to be stress, environmental change, physical ailments, excessive usage of digital devices, etc.

Insomnia is a treatable condition, if detected early. There are three common stages prevalent in most people, i.e., chronic, transient and acute. Chronic insomnia may need medical attention whilst acute or transient insomnia which is diagnosed to last maximum up to three weeks can simply be treated with therapy. Therefore, in order to cater to those who are suffering from Insomnia with less regard, or no sufficient resources to access medical care, SLEEPLINE was put forward.

This mobile application aims to act as a Insomnia level predictor and therapy detector. In the event of further clarification or clinical advice, the application enables the user to connect with a doctor via chat. The main approaches utilized to develop this application was iterative and incremental model, PRINCE2 and OOP. Whilst the code was scripted by using languages and tools such as JS, Node.JS, python, flask, mongo DB, etc.

The results obtained from the functional testing and user testing immensely contributed towards obtaining feedback and determining the feasibility of this project. The final deliverable met the initial requirements, project aims and objectives that ensured insomnia is a disorder that can be cured with just a few clicks away from your mobile phone.