Software Requirements Specification

For

Accurate Stress Detection of Elderly Patients Using Machine Learning Algorithms

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1. Introduction

1.1 Methodology

The project is about detect the stress of elderly patients using machine learning algorithms.

1.2 Purpose

The purpose of this project is that effectively suggests contents of interest ton users basedon various kinds of context information.

1.3 Scope

The Scope of the project is to provide greater protection against for different claims of elderly patients.

1.4 Tools Used

Jupyter, SPSS, Kaggle.

1.5 References

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5. Elzeiny, Sami, and Marwa Qaraqe. 2018. "Machine Learning Approaches to Automatic Stress Detection: A Review." *2018 IEEE/ACS 15th International Conference on Computer Systems and Applications (AICCSA)*. https://doi.org/10.1109/aiccsa.2018.8612825.

1.6 Technologies to be used

- KNN Algorithm, Naïve Bayes Algorithm, SPSS.

1.7 Overview

Existing System:

The existing system will be still insufficient to determine the most appropriatemethods for the detecting the stress level detection.

Proposed System:

The proposed process will be more effective and will give better accuracy rate than the previous work.

Our Plan:

The intention behind building this was to discerning the stress level for elderly people because more of that stress will cause chronical diseases. This will also helpful for immediate response testimony for doctors in hospitals.

2. Overall Description

From this proposed work, one can perform an initial analysis for mental stress detection to help the individuals to undergo treatment at the earliest. It is also observed that the proposed KNN algorithm performed significantly better than the Naive Bayes algorithm in mental stress detection. There is an improvement in the accuracy of the proposed algorithm.

3. External Interface Requirements

3.1 Hardware Interfaces

- Hard Disk Drive : 256 GB(using 512GB)
- Processor : intel i5
- RAM : 4GB(min) (using 8GB)

3.2 Software Interfaces

- Software : SPSS, Jupyter
- Scripting Language : Machine Learning Algorithms
- Operating System : Any Operating system(using windows 10)