

Mini-Project – 2B Web based on ML (ITM 601)

PROPOSAL

MEDICAL INSURANCE COST RECOMMENDATION

T. E. Information Technology

By

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Mini Project Proposal

(strictly one page)

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| Project Title | Medical Insurance Cost Predictor |
| Project Members (Mention Leader in Bold) | Parth Dali Harshkumar Bhikadiya Shivam Bhosale Pranav Dalvi |
| Situation/Problem/Opportunity/Need | With the constantly increasing prices of healthcare in our country, and with the ever-rising instances of diseases, health insurance today is a necessity. Health insurance provides people with a much-needed financial backup at times of medical emergencies. |
| Problem Statement | To develop a machine learning model which can recommend the cost of insurance policy which a customer should purchase. This model will be able to recommend the cost of insurance to the customers based on their BMI, age, medical history, and smoking habits. |
| Objectives | 1) To build a Machine learning model to recommend insurance policies. 2) To help the customer to be financially prepared in case of medical emergency |
| Method /Approach (Steps/Modules/Proposed Work/Architectural Dia.) | 1) Data Collection 2) Data Preprocessing 3) Extraction of Feature Set/Training Data 4) Implementation of Machine Learning Algorithm on Feature Set/Training Data 5) Testing of Data |
| Success Criteria (Advantages / Performance Metrics) | 1) To accurately recommend insurance policy to customers based on their BMI, age, medical history, and smoking habits etc. and encourage them to buy policies. <ul style="list-style-type: none">2) By providing accurate recommendations our model will help customers buy insurance policies at right amount. |
| Resources (People ,Time, hardware / software resources, dataset, online survey with google form, cost, other) | Front-End Design: HTML, CSS, Bootstrap Editor Tools: PyCharm/ Jupyter Notebook Web Browser: Google Chrome Dataset: Kaggle website |
| Risk and Dependencies | Medical costs are difficult to predict since most money comes from rare conditions of the patients. |

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| Remark (can be continued as BE Project/Outhouse Project) | can be continued as BE project |
| References (IEEE Format) | <p>[1] M. Choi, "Medical Cost Personal Datasets." [Accessed: 24-Jan-2022].</p> <p>[2] Researchgate.net. [Online]. Available:https://www.researchgate.net/publication/348559741_Predict_Health_Insurance_Cost_by_using_Machine_Learning_and_DNN_Regression_Models. [Accessed: 24-Jan-2022].</p> |