**A System for Medical Assistance by Text processing**

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**Authors**

**Abstract**

This project introduces a user-friendly Medical Chatbot, a simple tool for understanding health-related concerns. The chatbot is designed to make it easy for users to input symptoms and get information on potential health issues, including causes and possible treatments.

Consider a scenario where someone experiences sudden fatigue and is unsure about its cause. Instead of scrolling through a multitude of search results, our Medical Chatbot provides a quick and straightforward solution. Users can input their symptoms, and the chatbot responds with insights into potential causes and suggested actions, offering clarity in moments of health-related uncertainty.

Unlike other complicated systems, we kept things straightforward. Our goal was to create something better for everyday health questions. The chat happens on a basic website, ensuring accessibility for everyone.

In our project, we prioritize honesty and give credit where it's due. It's not just about technology; it's about offering a helping hand and making health information easy to access. We've considered ethical aspects, ensuring a responsible and trustworthy approach to development.

Looking ahead, our plans involve making the Chabot even more helpful, potentially adding features that keep things simple and user-friendly. This project is not about complexity; it's about making health insights accessible and understandable for everyone.

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1. Introduction
   1. Background

Modern healthcare is becoming increasingly intricate, requiring innovative solutions to simplify and improve medical processes. One significant challenge is the effective identification and communication of information related to diverse medical conditions. In the current landscape, individuals often face difficulties in obtaining timely and accurate insights into potential health issues. This project aims to tackle this challenge by introducing a Medical Chatbot designed to detect diseases and furnish information about their causes and treatments.

The existing healthcare system, with its complex structures and sometimes overwhelming information, poses barriers to accessible and swift understanding of health concerns. Patients and individuals often encounter challenges in comprehending medical jargon, navigating through vast amounts of information, and accessing personalized insights into their specific health situations.

In light of these challenges, the development of a Medical Chatbot emerges as a solution to streamline the identification of diseases and provide easily understandable information on their causes and potential treatments. By leveraging technology to simplify and personalize health-related interactions, this project seeks to empower individuals with accessible and relevant information, contributing to a more efficient and user-friendly healthcare experience.

* 1. Objectives

1.Create a Medical Chatbot System: Develop a system that can answer health questions and help people understand possible medical issues.

2. Make an Easy and Friendly Interface: Design a website that's simple to use, so anyone can find the health info they need without confusion.

3. Understand Questions Better:

Teach the chatbot to comprehend what people say in a natural way, improving its ability to figure out possible health problems.

4. Give Simple Info on Diseases: Ensure that the chatbot shares clear and easy-to-understand details about what might be causing a health issue and what can be done about it.

These objectives aim to build a Medical Chatbot that's not only good at tech stuff but also makes it easy and helpful for everyone who needs health info, using regular language.

* 1. Scope

The. ……………….

* 1. Unfamiliarity of the problem

The ………….

* 1. Project planning

The. …………….

1. Related Works
   1. Related works

Physarum polyce

* 1. Discussion of research gap solution

The intelligent behavior of slime mold was first observed by Nakagaki et al. in 2000 [2]. They assume that the flow is laminar and follows the Hagen-Poiseuille equation, the flux through the tube is,

here is the viscosity of the fluid, and is a measure of the conductivity of the tube. As the length is a constant, the behavior of the network is described by the conductivities of the edges.

Here we summarize various works of network construction using Physarum inspired technique in the following Table 2.1.

**Table 2.1:** Network construction using Physarum.

|  |  |  |
| --- | --- | --- |
| Authors & Year | Project Title | Contribution |
| Tero et al., 2010 [6] | Rules for Biologically Inspired Adaptive Network Design | Tokyo Rail Network construction |
| Adamatzky et al., 2011 [7] | Rebuilding Iberian motorways with slime mould | Iberian motorway network construction |
| Adamatzky et al., 2011 [8] | Approximating Mexican highways with slime mould | Mexican Federal highway network construction |
| Adamatzky et al., 2013 [8] | Slime mould imitates transport networks in China | Slime mould protoplasmic networks on major urban areas of China |

1. System Design

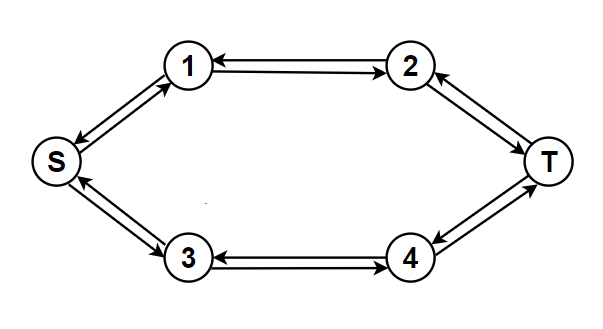
There exist lots of challenges in some of mega cities like Dhaka such as road conditions are not good enough, cycling lanes ………………………

* 1. Analysis of the system

This research aims at extending a construction pattern for our network to Dhaka, Bangladesh's capital city. The main challenges with Dhaka city are described in followings……………………….

* 1. System architecture

Green City also named as Eco-city or Sustainable city is a city designed with consideration for the social, economic, environmental impact which consists of several elements such as Green Transports. A simple network in shown in Fig. 3.1. It shows that ……………



**Figure 3.1:** Real traffic network.

* 1. Tools used

In more ways than one, driving a bicycle has a positive impact on the environment. They are also less expensive than other forms of ………………………………………

* + 1. Android Studio

Bicycles are considered zero-emission vehicles i.e. they do not release any carbon emissions. Bicycles, as vehicles with ………………………………………

* + 1. Kotlin

Bicycles are considered zero-emission vehicles i.e. they do not release any carbon emissions. Bicycles, as vehicles with ………………………………………

1. Project Implementation

This chapter implements the……………….

* 1. System implementation

At first, a selected portion of Dhaka city is considered to construct the network using Physarum inspired technique…………….

* 1. Morality or ethical issues

At first, a selected portion of Dhaka city is considered to construct the network using Physarum inspired technique. And it can also lead to better mental health and energy by bicycling 30 minutes a day [3], [4]………………………….

* 1. Socio-economic impact and sustainability

At first, a selected portion of Dhaka city is considered to construct the network using Physarum inspired technique……………....................................

* 1. Financial analyses and budget

At first, a selected portion of Dhaka city is considered to construct the network using Physarum inspired technique……………………….

1. Conclusion

A modified Physarum-inspired model is presented in this project to address the design of the bicycle lane network…………………………………….

* 1. Conclusion and challenges faced

The network design technology inspired by Physarum is believed to have balanced costs, effectiveness, and resilience. Inside Dhaka city, an unorganized and unplanned city, we have developed an electric bicycle ……………………

* 1. Future Study

# In the future, parallel computing and the optimal model for the design of the transport network are part of our work. Furthermore, our research includes the implementation of the Physarum ……………………….

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**N.B.** This is the preferable format for Report writing. The subsections written in italic forms (i.e., 1.4, 1.5, 4.2, 4.3, 4.4) are fixed. However, the Supervisor can extend the sections/points of the report (if necessary).