

SEE-MATH : A Math Visualization Website

A THIRD YEAR PROJECT REPORT

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF B.Sc. IN COMPUTATIONAL MATHEMATICS

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CERTIFICATION

This project entitled "SEE-Math : A Math Visualization Website" is an original work carried out under my supervision for the specified entire period satisfactorily, and is hereby certified as a work done by following students

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I hereby declare that the candidate qualifies to submit this report of the Computer Project (Comp-311) to the Department of Mathematics.

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ABSTRACT

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LIST OF SYMBOLS

Your parameters here.

CHAPTER 1

Introduction

1.1 Background

1.2 Objectives

- 1.
- 2.
- 3.
- 4.

1.3 Motivation And Significance

CHAPTER 2

Related Works

CHAPTER 3

Design And Implementation

CHAPTER 4

System Requirement Specification

4.1 Software Specification

4.1.1 Front-End Tools

- **Front-End Design** : HTML, CSS, Jekyll , Ruby, Markdown
- **Code Editor** : Visual Studio Code
- **Browser** : Any modern browser that supports JavaScript

4.1.2 Back-End Tools

- **Back-End Tools** : JavaScript

4.1.3 Utility Tools

- **Source Control** : Git, GitHub
- **Project Management** : Viber, Gmail
- **Report Writing** : Latex

4.2 Hardware Specification

Any modern computer with computing power enough to connect to the Internet via a browser that supports JavaScript and follows standard web protocols.

CHAPTER 5

Discussion On The Achievements

5.1 Features

CHAPTER 6

Conclusion And Recommendation

6.1 Limitations

6.2 Future Enhancements

REFERENCES

- [1] R. Doe, *Miktex url*, <http://www.miktex.org>, June 2009.
- [2] K. C. Gokul, D. B. Gurung, and P. R. Adhikary, *Fem approach for one dimensional temperature distribution in the human eye*, Proceedings of National Conference on Mathematics (Kathmandu) (P. R. Adhikary, K. Jha, and C. Bhatta, eds.), Nepal Mathematical Society, 2012, pp. 35–46.
- [3] D. B. Gurung, *Mathematical study of abnormal thermoregulation in human dermal parts*, PhD Dissertation, Kathmandu University, 2008, pp. 1–188.
- [4] H. Kopka and P. W. Daly, *A guide to latex*, Addison-Wesley, Reading, MA, 1999.
- [5] B. Roy, S. K. Roy, and D. B. Gurung, *Holling-Tanner model with Beddington-DeAngelis functional response and time delay introducing harvesting*, Mathematics and Computers in Simulation **142** (2017), 1–14.