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|  | MANIPAL INSTITUTE OF TECHNOLOGY  (A constituent Institute of MANIPAL UNIVERSITY)  MANIPAL - 576 104, KARNATAKA, INDIA |  |

Industrial Training

on

Web Application Development using MongoDB

SUBMITTED

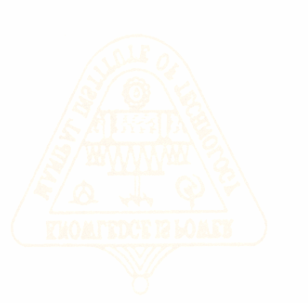
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Under the Guidance of:

Pandarinath Siddineni

Director

Informatics In Context Med. Software IPL

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CONTENTS

ABSTRACT

INTRODUCTION

PROBLEM DEFINITION (PROJECT)

1. Understand various tack elements used in web based application development.
2. Hands on experience with development tools (Eclipse, GIT, GIT Issues, DB Management etc.)
3. Study Healthcare Domain and Understand ICD codes and its usage.
4. Design and development of Databases for ICD and NPI databases using MongoDB
5. Web application development for:
   1. ICD look up
   2. ICD-9 Vs ICD 10 conversion
   3. Physician lookup application
6. Publishing API (web services) for
   1. ICD9 and ICD-10 lookup
   2. NPI database loop
7. Database optimization for large dataset like NPI database

STUDY — FULL STACK DEVELOPMENT PLATFORMS

ARCHITECTURE AND DESIGN

Development Platform:

1. Python
2. Bottle
3. MongoDB
4. MongoEngine and PyMongo
5. HTML, CSS
6. JavaScript

Deployment:

Bottle MVC framework: (Model-View-Controller):

NO SQL Data Bases:

Why MongoDB?

Mongo Data Base:

DEVELOPMENT METHODOLOGY AND TOOLS

1. GitHub: Version Control and Configuration Management
2. RoboMongo, Version-XXX: DB administration and Visualization
3. Eclipse IDE Neon Version-XXX
4. Task Assignment and Issue Tracking: Git Issue

RESULTS AND TESTING

CONCLUSION

REFERENCES

**INFORMATION**

**(Regarding Industrial training)**

**IV year B.Tech. (CSE)**

1. Industrial training could be training, internship, to be completed before 7th semester for a minimum period of 4 weeks
2. Certificate from the organization citing the date of commencement of the training and the end date (minimum of 4 weeks) is essential.
3. The certificate should preferably contain the word **“industrial training”** in it.
4. It should be attested by the organization head or any concerned authority.

The following information should be present in the industrial training report.

1. Front page
2. Copy of the Certificate from the company in the company letterhead
3. Abstract ( 1 page)
4. Details of the organization (1-3 pages)
5. Information acquired during the study period (10-20 pages)
6. Conclusion (1 page)
7. References in IEEE format

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Industrial training coordinator H.O. D ( Dept. of CSE)

Shanthi P.B