

## **ACKNOWLEDGEMENT**

We would like to thank ACHS College and its Computer Science and Internet Technology department for letting us prepare this project and especially our supervisor Er. Chhetra Bahadur Chhetri for encouraging us and helping our group to prepare this project. We would also like to thank them for giving us valuable suggestions on this project.

We would also like to thank everyone else which includes the rest of our teachers and friends for their technical suggestions that helped us to complete the project in a better way.

Finally, we would like to express our deep gratitude to our seniors and guardians who helped us to prepare this project and encouraged us whenever required.

## **ABSTRACT**

The traditional means of getting information about futsal has been so old fashioned and not so efficient means to the players. Futsal recommender system is the advancement that has taken place in the field of technology replacing traditional method. Futsal Recommender System is a web-app which provides user with features like futsal recommendation. The proposed system aims to overcome the pitfall of the existing system. This application allows the user to create an account and log in to the system. The data is then stored in the database. Using the account, the user can book futsal and get recommendation from the system. It helps the user to easily get the information about the futsal and the available time. This system will overcome the difficulties that every futsal player is facing these days in our city.

## Table of Contents

<b>LIST OF ACRONYMS AND ABBREVIATIONS.....</b>	<b>v</b>
<b>LIST OF FIGURES.....</b>	<b>vi</b>
<b>LIST OF TABLES.....</b>	<b>vii</b>
<b>CHAPTER 1: INTRODUCTION.....</b>	<b>1</b>
<b>1.1 Background.....</b>	<b>1</b>
<b>1.2 Problem Statement.....</b>	<b>1-2</b>
<b>1.3 Objectives.....</b>	<b>2</b>
<b>1.4 Project Features.....</b>	<b>3</b>
<b>1.5 Scope.....</b>	<b>3</b>
<b>1.6 Limitation.....</b>	<b>3</b>
<b>CHAPTER 2: LITERATURE REVIEW.....</b>	<b>4-5</b>
<b>CHAPTER 3: REQUIREMENT AND FEASIBILITY ANALYSIS.....</b>	<b>6</b>
<b>3.1 FEASIBILITY ANALYSIS.....</b>	<b>6</b>
<b>3.1.1 Economic Feasibility.....</b>	<b>6</b>
<b>3.1.2 Technical Feasibility.....</b>	<b>6</b>
<b>3.1.3 Operational Feasibility.....</b>	<b>6</b>
<b>3.1.4 Schedule Feasibility.....</b>	<b>6-7</b>
<b>3.2 REQUIREMENT SPECIFICATION.....</b>	<b>7</b>
<b>3.2.1 Preliminary Analysis.....</b>	<b>7</b>
<b>3.2.2 Functional Requirements.....</b>	<b>8</b>
<b>3.2.3 Non-Functional Requirements.....</b>	<b>8-9</b>
<b>3.2.4 Software Requirements.....</b>	<b>9-10</b>
<b>3.2.5 Hardware Requirements.....</b>	<b>10</b>
<b>CHAPTER 4: SYSTEM DESIGN AND METHODOLOGY.....</b>	<b>11</b>
<b>4.1 SOFTWARE PROCESS MODEL.....</b>	<b>11-12</b>
<b>4.2 USE CASE DIAGRAM.....</b>	<b>12-13</b>
<b>4.3 CLASS DIAGRAM.....</b>	<b>13-14</b>

4.4 SEQUENCE DIAGRAM.....	14-15
4.5 COLLABORATION DIAGRAM.....	15-16
4.6 ER DIAGRAM.....	16-17
4.7 DATA DICTIONARY.....	17-18
CHAPTER 5: SYSTEM DEVELOPMENT AND TESTING.....	19
5.1 SYSTEM DEVELOPMENT.....	19
5.1.1 Technologies and Platform Used.....	19-21
5.1.2 Algorithm Implementation.....	21
5.1.2.1 Matrix Formulation.....	21-22
5.1.2.2 Similarity Calculation.....	22-23
5.1.2.3 Recommendation.....	23-24
5.2 SYSTEM TESTING.....	24-27
5.3 TEST RESULTS.....	27-28
CHAPTER 6: OUTPUT AND CONCLUSION.....	29
6.1 OUTPUT.....	29
6.2 FUTURE PLAN.....	30
6.3 CONCLUSION.....	30
REFERENCES.....	31
APPENDIX.....	32-44

## **LIST OF ACRONYMS AND ABBREVIATIONS**

CSS	Cascading Style sheets
ER	Entity Relationship
HTML	HyperText Markup Language
HTTP	HyperText Transfer Protocol
ICT	Information and Communication Technology
IDE	Integrated Development Environment
JS	JavaScript
PHP	PHP Hypertext Preprocessor
RDBMS	Relational Database Management System
SDLC	Software Development Life Cycle
SQL	Structured Query Language
W3C	World Wide Web Consortium

## LIST OF FIGURES

1. Gantt Chart.....	6
2. Iterative model.....	8
3. Use case diagram.....	9
4. Class diagram.....	10
5. Sequence diagram.....	11
6. Collaboration diagram.....	12
7. ER diagram.....	14-15
8. Integration test.....	17-18

## LIST OF TABLES

1. Software requirements.....	7
2. Data Dictionary.....	8
3. Test case for Login.....	9