



Manipal Academy of Higher Education

Minor project synopsis
Hockey Scoring Application

MCA Sec - A
(Batch A1)
Team 6

Team Members :

Gol Prit (240970069)
Saptaparni (240970011)
Kavyashri (240970040)
Harshitha (240970078)
Arun krishna (240970059)

Project Synopsis

Project Title: *Smart Hockey Scoring and Match Management Application*

Objective:

The primary goal of this project is to develop a user-friendly Android application that enables users to manage hockey game scores, player statistics, and match events. The app aims to simplify scorekeeping, enhance team management, and provide valuable analytics.

Problem Statement:

Traditional methods of tracking hockey scores and player performance are often manual, error-prone, and less accessible. There is a need for a digital solution that allows seamless and accurate scorekeeping with additional features like team lineup management, match timelines, and performance summaries.

Proposed Solution:

The Hockey Scoring App will allow users to:

- Record goals, assists, and fouls.
- Maintain player profiles and match history.
- Automatically calculate team statistics (e.g., possession time, shots on goal, penalties).

Modules and Features

1) User Authentication & Access Control

Feature	Description
Phone Number/Password Login	Users can log in securely using Firebase Authentication.
Registration	New users can sign up with their details.
Password Reset	Users can recover their password via email.
Session Persistence	Keeps users logged in until they log out manually.

2) User Module

Feature	Description
Create Matches	Users can create their own custom matches for scoring.
Add Teams to Match	Select or create teams and assign players.
Add Players	Add or edit player details for custom matches.
Manual Scoring	Record goals, assists, and fouls for each player.

Match Summary	View a complete summary of the match after finishing.
Match History	View previously created and completed matches.
Search and Filter	Find matches by name, date, or teams.

3) Match Analytics & Leaderboards

Feature	Description
Match Summary	A detailed result page for completed matches.
Goals per Period	A detailed result page for completed matches
Leaderboard	Ranking of players based on performance (most goals, assists).
Win/Loss Ratio	Team performance history

Technology Stack:

- **Frontend:** Java with XML (Android)
- **Backend:** Java
- **Database:** Firebase Realtime Database
- **Authentication:** Firebase Authentication

Target Users:

- Local and school-level hockey teams
- Sports enthusiasts

Conclusion:

The Hockey Scoring App addresses a real-world gap in efficient match scoring and player performance tracking. By providing detailed analytics, it enhances team performance evaluation.