Six Months Industry Internship Report

On

Revolutionizing Educational Technology: Building Personalized Digital Coaching Platform for Sports

At

Well Played Sport , Nagpur

Submitted by

Sangram Ramchandra Chougule

Under the Guidance of

Mr. Mahendra Sawane
(Internal Guide)

Mr. N. K. Singh
(External Guide)

Department of Computer Science,

G H Raisoni University, Amravati,
January, 2025
Academic Year 2024-25

INDUSTRY INSTITUTE INTERACTION CELL CERTIFICATE

This is to certify that Mr. Sangram Ramchandra Chougule has satisfactorily completed the six-month industry internship entitled Full Stack Developer Intern at Well Played Sport, Nagpur from 15 January 2025 to 15 July 2025. During the academic year 2024-25 for the partial fulfillment of B. Tech in Computer Science, G H Raisoni University, Amravati.

Mr. Mahendra Sawane
(Internal Guide)

Mr. N. K. Singh
(External Guide)

Dr. Simran Khiani
(HoD of Comp Department)

Prof. Mahendra Sawane
(Department III Coordinator)

Prof. Narsing Kadam
(Department III Coordinator)

Internal Examiner

External Examiner

Dr. R. D. Kharadkar
Director
GHRCEM Pune

DECLARATION

I, Sangram Ramchandra Chougule, hereby declare that this internship report, conducted at Well Played Sport, Nagpur, from 15th January 2025 to 15th July 2025 during the academic year 2024-25, and submitted to G H Raisoni University, Amravati in partial fulfillment of the requirements for the award of the degree of B.Tech in Computer Science, is a record of the   work carried out by me under the guidance of Prof. Mahendra Sawane.

All the information and data presented in this report are authentic and have been collected, analyzed, and documented during the course of my internship at Well Played Sport. I further declare that this report has not been submitted, in part or full, for any other academic or professional purpose. I sincerely acknowledge and express my gratitude to my mentor at Well Played Sport ,whose valuable guidance and expertise significantly contributed to the successful completion of my internship. Any contributions or assistance from others during the internship period have been duly acknowledged within this report. I fully understand that any misrepresentation or falsification of information in this report may result in actions as per academic or organizational policies.

<div align="right">

With regards,
Sangram Chougule
GHRUA

</div>

ACKNOWLEDGEMENT

ABSTRACT

Commencing my internship at Well Played Sport, a leading provider of technology solutions specializing in Backend development, was an incredible opportunity to contribute to innovative projects and enhance my technical skills. From 15-01-2025 to 15-07-2025, I actively participated in development processes aimed at optimizing web functionalities, improving user experiences, and supporting Well Played Sport' mission of driving digital transformation and innovation.

Objectives:
- Skill Development: Acquiring practical skills in Full Stack Development technologies including React.js, Node.js, and Express.js development within a collaborative and professional environment.
- Contribution: Actively contributing to the enhancement of the Creating API's and educational technology solutions for business process optimization.
- Industry Understanding: Gaining insights into the challenges and strategies within the backend development domain and educational technology initiatives.

Vision:
Well Played is Personalized Digital Coaching Platform for Sports. It aims to make high end technology platform available for every grass-root level player and coach and in turn democratize sports analytics in Cricket & multi sports.

Addressing Industry Challenges:
Well Played Sports   I actively contributed to the development and enhancement of a personalized digital coaching platform aimed at democratizing sports analytics for grassroots-level players and coaches. My internship focused on solving real-world challenges in the sports tech industry, aligned with the company's mission to deliver impactful digital solutions through:

- Scalability: I helped design and develop scalable backend APIs using Node.js, Express.js, and MySQL to support live cricket scoring, player statistics tracking, and tournament management for a growing user base across multi-sport environments.
- Efficiency: I implemented data filtering, live data fetching, and match-specific analytics that streamlined information access for coaches and players. My contributions reduced response latency and improved backend performance in processing complex queries.
- User Experience:I supported frontend integration efforts by building well-documented and consistent RESTful APIs that enhanced the responsiveness and reliability of the React-based user interface.

This introduction sets the foundation for the subsequent sections, where I will elaborate on my role, the technical aspects of Full Stack development during the internship, and the projects that aligned with Well Played Sport's mission and vision.

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INTRODUCTION

Well Played Sports Pvt. Ltd. is a personalized digital coaching platform founded by ex-national level players and BCCI-certified coaches. The company aims to democratize sports analytics by providing grassroots-level players and coaches with access to high-end technology. Through its AI-driven mobile application, Well Played offers tools for performance analysis, coaching, and skill development, making advanced sports training accessible to all.

The platform caters to players, coaches, clubs, and parents, enabling features like video analysis, standardized   coaching checklists, and performance tracking. By leveraging technology, Well Played strives to enhance the sports ecosystem, fostering talent development from the grassroots level.

Core Mission:
- Empowering Grassroots Talent: Well Played is dedicated to making advanced sports analytics and coaching technology accessible to every grassroots-level player and coach, enabling them to unlock their full potential.
- Innovative Sports Technology: We leverage cutting-edge digital tools and AI-driven solutions to revolutionize sports coaching, performance analysis, and player development across cricket and multiple sports.
- Democratizing Sports Analytics: By bridging the gap between elite-level analytics and grassroots participation, we strive to create a more inclusive and transparent sports ecosystem that benefits players, coaches, clubs, and parents alike.

Key Products and Services:
- Sports Performance Analytics: Real-time data tracking and analysis tools designed to provide actionable insights for players and coaches in cricket and multiple sports.
- Mobile and Web Applications: User-friendly, responsive apps built with modern frameworks to deliver seamless access to coaching, performance data, and training resources.
- Grassroots Player Development Tools: Technology solutions aimed at identifying and nurturing emerging talent through detailed performance monitoring and progress tracking.
- Personalized Digital Coaching Platform: A comprehensive platform offering tailored coaching experiences driven by advanced sports analytics and AI technology.

Global Presence:
Office: 66, Madhav Nagar, Near PMG Hall, Nagpur 440010

ORGANIZATION STRUCTURE

Well Played Sports Pvt. Ltd. operates with a dynamic organizational structure designed to empower data-driven sports development and deliver impactful digital coaching solutions. The framework encourages seamless collaboration across its engineering, analytics, and sports education teams, fostering innovation and operational efficiency. Key components of Well Played's structure include:

Leadership Team
- Executive Management: Led by ex-national level athletes and certified coaches, this team drives the company's mission to revolutionize grassroots sports through technology and mentorship.
- Technical Leadership: Senior engineers and product strategists guide core development practices, ensuring robust, scalable, and innovative solutions.

Business Units
- Sports Analytics and Coaching Platform: Focused on building and maintaining digital platforms for player development, live scoring, and performance tracking using modern technologies like React.js, Node.js, and Express.js.
- Tournament Management Solutions: Handles end-to-end digital support for managing sports tournaments, including live match tracking, team management, and leaderboard systems.
- Player & Coach Engagement Services: Delivers digital tools and platforms that foster better communication and growth opportunities for players and coaches.

Research & Development
- Frontend Development Team: Engineers crafting responsive user interfaces with React.js, ensuring a seamless experience for end users including players, coaches, and admins.
- Backend Development Team: Developers and database specialists responsible for robust API development, MySQL/MongoDB integration, and scalable server-side architecture.
- Data & Performance Analytics: A team working on building features like player statistics, match insights, and tournament data aggregation for coaches and analysts.

Operations & Support
- Agile Project Management: Uses tools like Jira to handle feature planning, sprints, and delivery milestones within an Agile development framework.
- Quality Assurance: Ensures thorough testing and validation of software features to maintain performance, accuracy, and reliability across web and mobile platforms.
- Technical Support & Maintenance: Dedicated to post-deployment support, assisting coaches, teams, and admins with technical queries and system updates.

Internship and Training Division
- Mentorship Program: Interns are guided by experienced developers through live projects, gaining exposure to real-world sports-tech challenges and industry practices.
- Skill Development: Focused on nurturing technical proficiency in JavaScript, API integration, database management, and agile teamwork, as well as soft skills like communication and problem-solving.

INTRODUCTION OF PRODUCT/SERVICE/SOFTWARE

Well Played Sports Pvt. Ltd., where I pursued my internship, is a pioneering digital sports technology company focused on transforming grassroots-level sports through data-driven coaching and performance analysis. Headquartered in Nagpur, India, and founded by national-level athletes and certified coaches, the company specializes in delivering personalized digital coaching experiences tailored for players, coaches, and academies across the country.

Key Offerings:

1. Digital Coaching Platform: A personalized mobile and web-based platform designed to assist players in skill development through structured practice schedules, video feedback, and match analytics.
2. Match Analysis & Performance Tracking: Tools for live scoring, highlights generation, and player-specific performance tracking using advanced frontend and backend technologies.
3. Coach & Player Dashboard: Intuitive dashboards for coaches and players to review practice videos, manage schedules, and analyze strengths and areas for improvement.
4. Tournament & Team Management: Comprehensive modules to handle tournament planning, match fixtures, team registration, and real-time leaderboard generation.

Mission and Vision:

Well Played aims to democratize access to professional-grade coaching and analytics by integrating technology into every layer of sports training. The mission is to empower every player with actionable insights, foster coach-player engagement, and bridge the gap between potential and performance through innovation. The vision is to become India's leading grassroots sports-tech platform, driving excellence and inclusivity in cricket and other sports.

Services Provided:

- Sports-Tech Software Solutions: Development and deployment of scalable web applications and APIs for digital coaching, tournament management, and player development.
- Agile Product Development: Real-time collaboration using tools like Jira, enabling iterative improvements in feature rollout, bug tracking, and client feedback integration.
- Training & Mentorship Programs: Structured programs for interns and junior developers to gain real-world experience under the guidance of experienced mentors through live product features and codebases.

Match Highlights & Analysis

Transform your cricket skills with WellPlayed

* Get match videos from umpire's view

* Get detailed insights on batting & bowling
- Boundaries & Sixes
- Scoring shots
- Dot balls
- Appeals & Wickets

*Know your strengths and improvement areas.

*Uncover winning strategies

Task Planner

Track your progress with Skill-o-meter and Task Planner

Stay on top of your cricket training schedule and take your game to the next level. Plan, track, and achieve your cricket goals with ease and efficiency

---

Practice Videos & Visual Feedback

Practice Videos & Visual Feedback

Improve your cricket skills anytime, anywhere by uploading Practice videos on Well Played's & visual Feedback from coach.

INTRODUCTION OF WORK ASSIGNED

During my internship at Well Played Sports Pvt. Ltd., I actively contributed to the development and enhancement of the company's core digital coaching platform and backend systems. My responsibilities spanned across multiple domains in full-stack development, allowing me to apply theoretical concepts in real-world projects while gaining hands-on experience in scalable software solutions.

Backend Development:
I worked extensively on backend modules using Node.js, Express.js, MySQL, and Sequelize ORM. My tasks involved building robust RESTful APIs for modules like match analysis, player performance tracking, tournament management, and video uploads. I implemented CRUD operations, optimized queries, and integrated complex data relationships to support analytical dashboards.

Database Design & Optimization:
I contributed to the creation and modification of data models for various tables, such as analysis, video_uploads, and team_members. This involved designing schemas, setting appropriate data types, and writing optimized queries to ensure database performance and integrity.

Frontend Development Support:
While my primary role focused on backend development, I collaborated with frontend developers working with React.js to ensure seamless API integration, accurate data rendering, and consistency between backend logic and UI presentation.

Agile Project Management:
I participated in Agile ceremonies, used Jira for ticket tracking, and collaborated with cross-functional teams to deliver features iteratively. This exposure improved my understanding of software development lifecycles and team collaboration.

Feature Implementation: Some of the key features I helped develop included:

- Match highlights and performance analytics modules.
- Tournament-level top player statistics and filtering logic.
- Video recording signal tracking and upload status monitoring.
- Automated data updates and status flags for analysis accuracy.

Code Quality & Testing:
I practiced clean coding standards and wrote maintainable, production-ready code with proper validations. I also reviewed and tested API endpoints to ensure accuracy, handled error logs, and participated in performance debugging.

Learning & Knowledge Sharing:
I consistently explored modern JavaScript frameworks and backend architectures under the mentorship of experienced developers. I also contributed to internal documentation to assist future developers in understanding implemented functionalities.

Through these responsibilities, I not only refined my technical skillset in JavaScript, Node.js, and database systems but also developed a deeper understanding of how data-driven platforms can support grassroots sports development through personalized digital coaching and analytics.

DETAILED STUDY

Objective:
The primary objective of my internship at Well Played Sports Pvt. Ltd. was to contribute to the development of scalable, real-time, and analytics-driven features for the company's personalized sports coaching platform. My focus was on backend development, RESTful API creation, database management, and feature integration to enhance the platform's data accuracy, performance, and user engagement.

Activities:

- Backend Development and Feature Enhancement: I was actively involved in developing and optimizing backend modules for the sports coaching platform. My tasks included building REST APIs, managing real-time data for live scores and player performance, and ensuring secure and efficient communication between the frontend and backend systems.

- Database Modeling and Optimization: I worked on structuring and optimizing relational database schemas using MySQL and Sequelize ORM. This included designing tables like analysis, team_members, video_uploads, and rounds to support tournament-based analytics and personalized player insights.

- Match Analytics and Performance Metrics: I helped implement modules that fetched and displayed detailed match statistics, including player rankings, ball-by-ball analysis, and highlights generation. These features supported coaches and players in reviewing performance through data-driven visuals.

- Tournament Management System: I contributed to building tournament-specific features, such as managing match rounds, updating match analysis data, and fetching top players per tournament. These modules allowed organizers to seamlessly operate multi-stage tournaments through the dashboard.

- Video Upload and Signal Tracking: I participated in building functionalities that enabled users to upload match footage and monitor signal loss during video recording. This ensured accurate video data collection and minimized issues during post-match analysis.

- API Testing and Error Logging: My responsibilities included testing endpoints using tools like Postman, validating data integrity, and handling asynchronous operations using Promises. I also implemented logging mechanisms to track and resolve backend errors.

- Team Collaboration and Agile Workflow: Working in an Agile environment, I participated in sprint planning and daily stand-ups. Using Jira, I tracked feature progress and coordinated with frontend developers for smooth API integration.

Tools and Technologies Used:
Frontend Technologies:
- React.js: Frontend framework used by the team for UI development.
- Axios/Fetch: For frontend-backend data communication.

Development Tools:
- Git/GitHub: Version control and collaboration
- VS Code: Primary development environment
- Browser DevTools: For debugging and performance testing
- Postman: API testing and debugging.
- Jira: Ticket management and sprint planning.

Backend Integration:
- Node.js: Core backend runtime environment.
- Express.js: Web application framework for building REST APIs
- MySQL: Relational database used for structured data storage.
- Sequelize: ORM for database modeling and querying.
- REST APIs: For client-server communication

Deployment & Hosting:
- AWS: Deployment of backend services and asset hosting.
- Elastic Beanstalk: Platform for managing scalable backend deployment.

Project Tasks Completed:

- **Tournament and Match List**
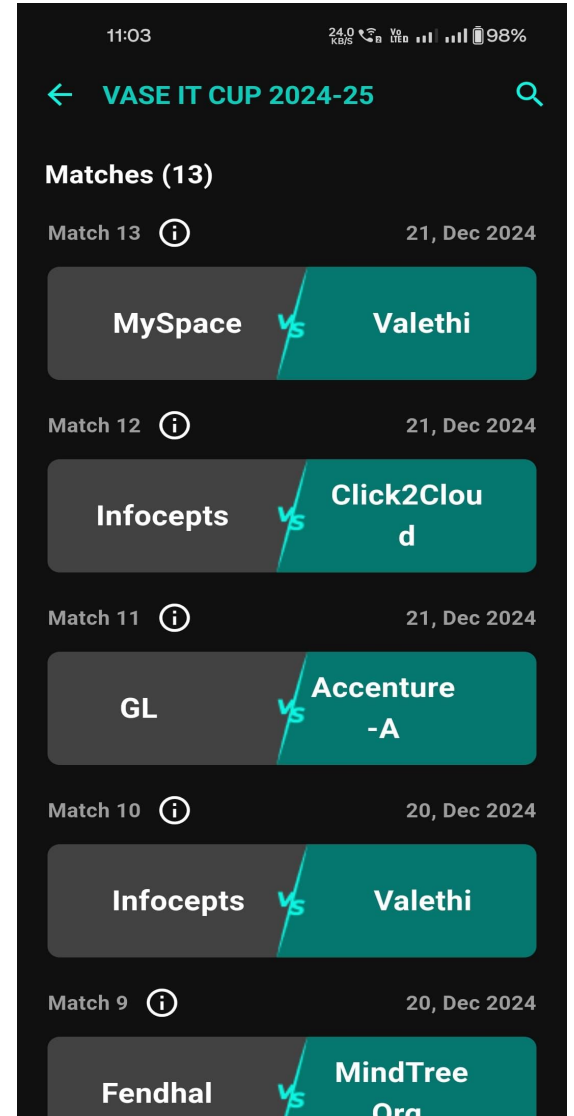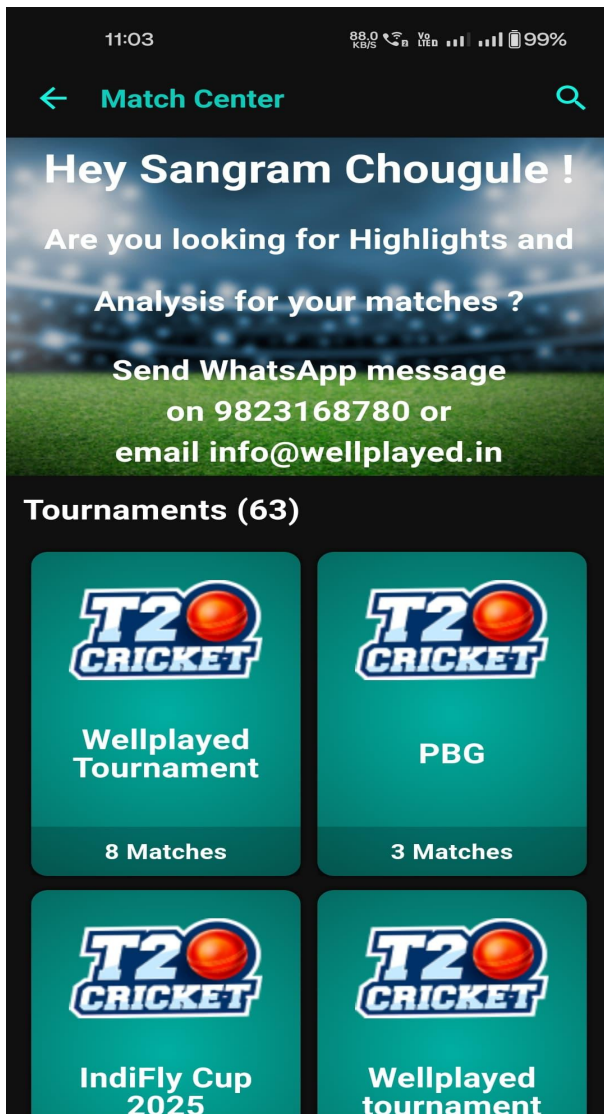
- **Match Scorecard**

POST ∨ http://localhost:4000/admin-stagging-api/get-batting-score   Send

Query   Headers 2   Auth   **Body** 1   Tests   Pre Run

JSON   XML   Text   Form   Form-encode   GraphQL   Binary

JSON Content   Format

```
1  {
2
3          "tournament_id":"232",
4          "match_id":"669"
5
6      }
7
```

Status: 200 OK   Size: 787 Bytes   Time: 227 ms

Response   Headers 7   Cookies   Results   Docs   {}

```
1  [
2      {
3          "bat_striker_id": "1324",
4          "runs_scored": "18",
5          "balls_faced": "14",
6          "strike_rate": "128.57",
7          "fours": "3",
8          "sixes": "0",
9          "innings": "1",
10         "full_name": "Bharat Naidu",
11         "wicket_taken_by": "Aachal Shahu",
12         "wicket_type": "c"
13     },
14     {
15         "bat_striker_id": "1344",
16         "runs_scored": "25",
17         "balls_faced": "25",
18         "strike_rate": "100.00",
19         "fours": "4",
20         "sixes": "0",
21         "innings": "1",
22         "full_name": "Bittu Khan",
23         "wicket_taken_by": "",
```

Response   Chart

- **Match Highlights**

```
GET ∨   http://localhost:4000/admin-stagging-api/match-highlights     Send

Query   Headers²   Auth   Body¹   Tests   Pre Run

JSON   XML   Text   Form   Form-encode   GraphQL   Binary

JSON Content                                          Format

1   {
2
3           "tournament_id":"234",
4           "match_id" : "686"
5
6       }
7
```

```
Status: 200 OK   Size: 26.74 KB   Time: 97 ms

Response   Headers⁷   Cookies   Results   Docs          {}   ≡

1   [                                                    Copy
2     {
3       "inning": 1,
4       "batsman": "Brandon king",
5       "runs_on_current_ball": 0,
6       "score_on_this_ball": 0,
7       "bowler": "Deepak Hooda"
8     },
9     {
10      "inning": 1,
11      "batsman": "Brandon king",
12      "runs_on_current_ball": 0,
13      "score_on_this_ball": 0,
14      "bowler": "Deepak Hooda"
15    },
16    {
17      "inning": 1,
18      "batsman": "Brandon king",
19      "runs_on_current_ball": 1,
20      "score_on_this_ball": 1,
21      "bowler": "Deepak Hooda"
22    },
23    {

                                        Response   Chart
```
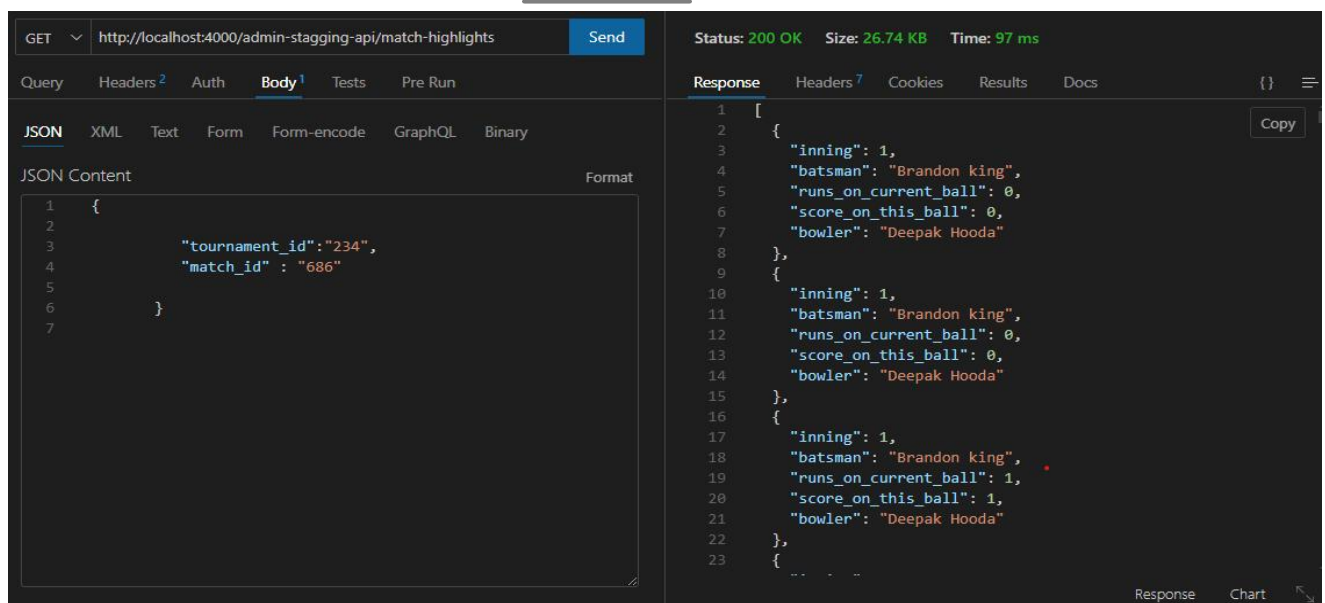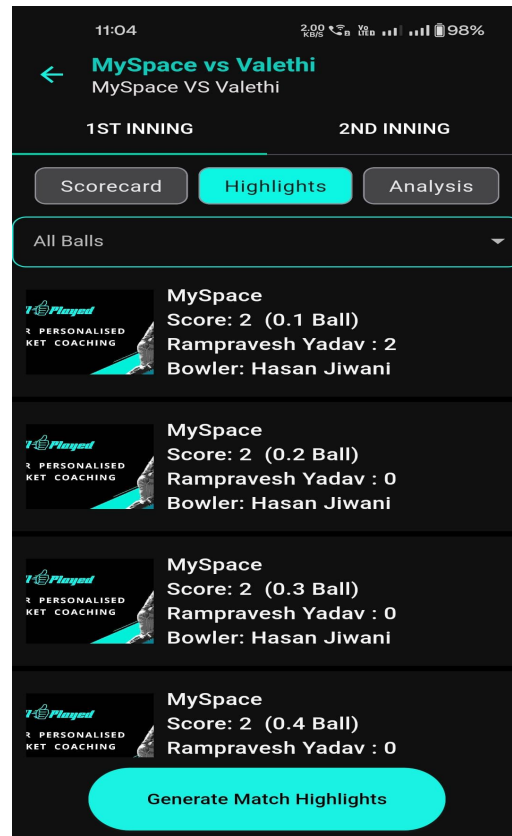
- **Scorecard and Tournament Create :**

Scorecard

Programs Completed :	0 / 1
Task Completed :	0 / 9
Run Scored :	0
Wickets Taken :	0

Beginner - Fast Bowling

Focus Area Completed :	0 / 3

Collected Feedback From Focus Areas :

Basic Bowling Setup

Bowling Grip

Feedback : NA

Coach Score :	0

Building Bowling Action

Measure Runup

Feedback : NA

Coach Score :	0

Ball Release

Feedback : NA

Coach Score :	0

Bowling Action - Runup and Bowl

Feedback : NA

Coach Score :	0

Bowling Action - Walk and Bowl

Feedback : NA

New Tournament

Create a Tournament

Add details to create a custom tournament.

Tournament Name

Enter name

Start Date

select start date

End Date

select End date

Tournament Type

Select match type

Tournament Age Category

Select age category

Create Tournament

- **Video Uploading and playing :**

PROJECT

PROJECT: MATCH ANALYTICS AND PLAYER PERFORMANCE PLATFORM FOR TOURNAMENT MANAGEMENT

During my internship at Well Played Sports Pvt. Ltd., I contributed to the development of a comprehensive sports analytics and coaching platform that aimed to revolutionize how tournaments are organized and how player performance is tracked and analyzed. The project was centered on creating a robust backend system that supports live scoring, player statistics, match analytics, video uploads, and personalized performance insights for grassroots-level athletes and coaches.

Project Overview:
The project was developed using a full-stack approach, leveraging backend services (Node.js, Express.js), databases (MySQL), and real-time APIs to provide actionable insights during and after cricket matches.

Key Features and Components:
- **Tournament and Match Management System :** The core of the system involved managing tournaments, matches, rounds, and associated players:
  - Tournament Rounds: Custom models and APIs to define round_type, round_number, start_date, and end_date.
  - Match Analysis: Integration of live match data with ball-by-ball tracking and inning summaries.
  - Team and Player Linking: Automated linking of teams and players using tournament ID and user ID fields for personalized analytics.

- **Ball-by-Ball Analytics and Highlights:**
  - Developed backend logic to extract highlights by analyzing ball_delivery_result, batsman_id, and bowler_id.
  - Created efficient queries to pull out highlights, individual batting and bowling statistics, and overall innings summaries.
  - Enabled structured insights for each match using REST APIs, supporting features like:
    - Top player performance
    - Match summaries
    - Real-time updates

- **Video Upload and Signal Loss Detection:**
  Implemented endpoints to handle video uploads tagged with tournament and match IDs.

  Built systems to track signal loss (via timestamp logs) during video recording, ensuring higher data accuracy for video-based coaching.

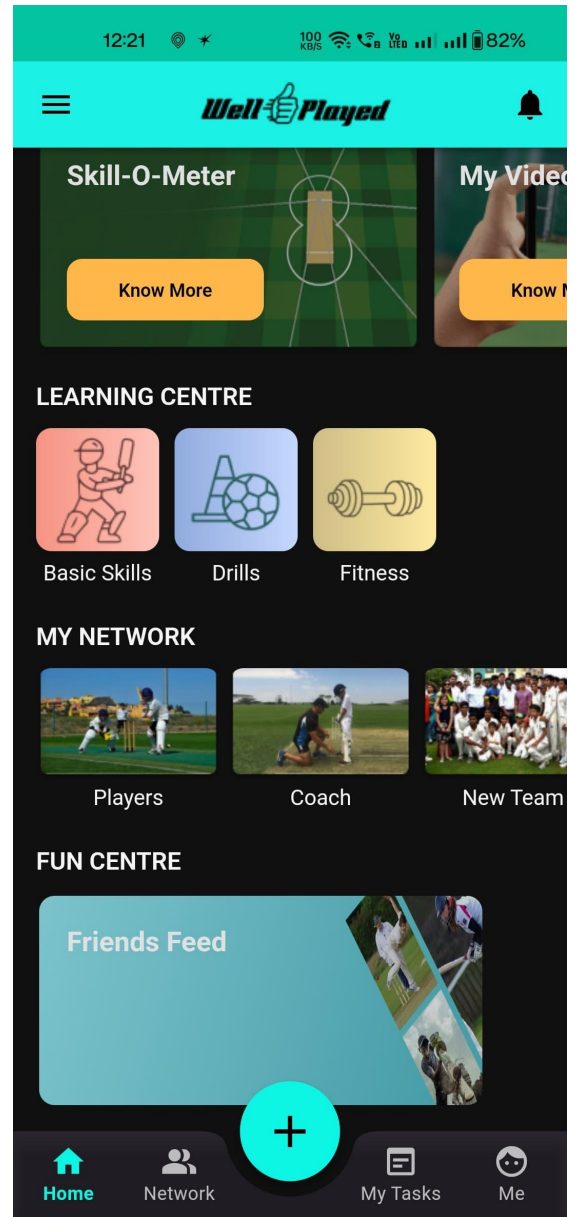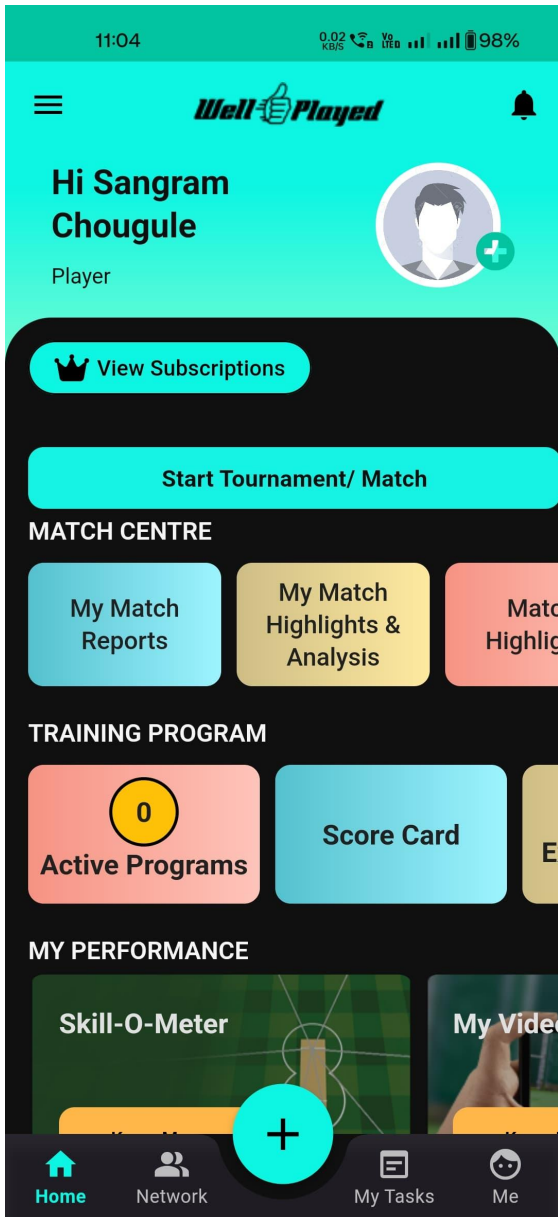- **API Design and Integration:**
  - Created scalable REST APIs using Express.js for:
    - Fetching player details
    - Updating match analysis
    - Managing video uploads and signals

  - Focused on data validation and secure communication between frontend (React) and backend

- **Admin Dashboard & Data Filtering:**
  - Developed APIs for admin dashboards, allowing:
    - Filtering of players by performance metrics
    - Displaying the top 10 players of a tournament
    - Custom filtering by match, team, and round types

  Tools and Technologies Utilized:
  - Frontend: React.js, Flutter
  - Backend: Node.js, Express.js, MySql
  - Deployment: Vercel, AWS Elastic Beanstalk
  - Analytics: Google Analytics, Google Tag Manager
  - Forms: Web3Forms integration
  - Version Control: Git, GitHub
  - Development Tools: VS Code, Browser DevTools

Screen 1

11:04   0.02 KB/S   98%

Well Played 🔔

Hi Sangram Chougule

Player

👑 View Subscriptions

Start Tournament/ Match

MATCH CENTRE

My Match Reports | My Match Highlights & Analysis | Match Highlig...

TRAINING PROGRAM

0 Active Programs | Score Card | E...

MY PERFORMANCE

Skill-O-Meter | My Video...

Home | Network | ➕ | My Tasks | Me

Screen 2

12:21   100 KB/S   82%

Well Played 🔔

Skill-O-Meter | My Video...

Know More | Know ...

LEARNING CENTRE

Basic Skills | Drills | Fitness

MY NETWORK

Players | Coach | New Team...

FUN CENTRE

Friends Feed

Home | Network | ➕ | My Tasks | Me

PROJECT: MOVIE EXPLORER WEBSITE – REACT-BASED MOVIE BROWSING PLATFORM

During my internship, I built the Movie Explorer Website, a responsive, interactive web application that allows users to search, explore, and save their favorite movies. This project aimed to provide a seamless and visually engaging user experience by integrating real-time movie data and implementing modular, reusable components using modern frontend development practices.

This project helped me strengthen my skills in React.js, API integration, state management, and component-based architecture. It demonstrates my ability to build dynamic web applications that consume external APIs and provide intuitive navigation and filtering functionalities.

Key Features and Components:
- **Homepage with Trending Movie Cards:**
  - The homepage displays trending or featured movies fetched from an external API (e.g., TMDB API).
  - Each movie is presented as a responsive card containing the movie poster, title, release date, and rating

- **Search Functionality:**
  - Users can search for movies by title using a search bar that queries the external movie database.
  - Real-time results are displayed as the user types, enhancing discoverability and interaction.

- **Movie Details Page:**
  - Upon clicking a movie card, users are navigated to a dedicated details page showing:
    - Synopsis/overview
    - Release year
    - Genre(s)
    - Runtime
    - IMDB rating

- **Favorites Management:**
  - Users can mark movies as "favorites" and view them on a separate page.
  - Favorite status is stored in local storage, maintaining persistence across sessions.

Technologies and Tools Used:

- **Frontend Development:** React.js, JSX, CSS3, HTML5
- **API Integration**: Axios or Fetch for calling movie data from TMDB or similar REST API
- **State Management**: React Hooks (useState, useEffect)
- **Routing:** React Router for navigation between pages
- **Storage**: Browser LocalStorage for saving favorite movies
- **Development Tools**: VS Code, GitHub, Chrome DevTools

Learning Outcomes and Impact:

Developing the Movie Explorer Website enhanced my proficiency in frontend development using React. It reinforced concepts like component reusability, prop/state handling, and conditional rendering. The integration with a third-party API helped me understand real-world data fetching, response handling, and user experience best practices.

This project showcases my ability to:
- Build scalable and interactive UIs
- Consume and manage external APIs
- Implement persistent client-side features
- Develop a user-centric, mobile-optimized web platform
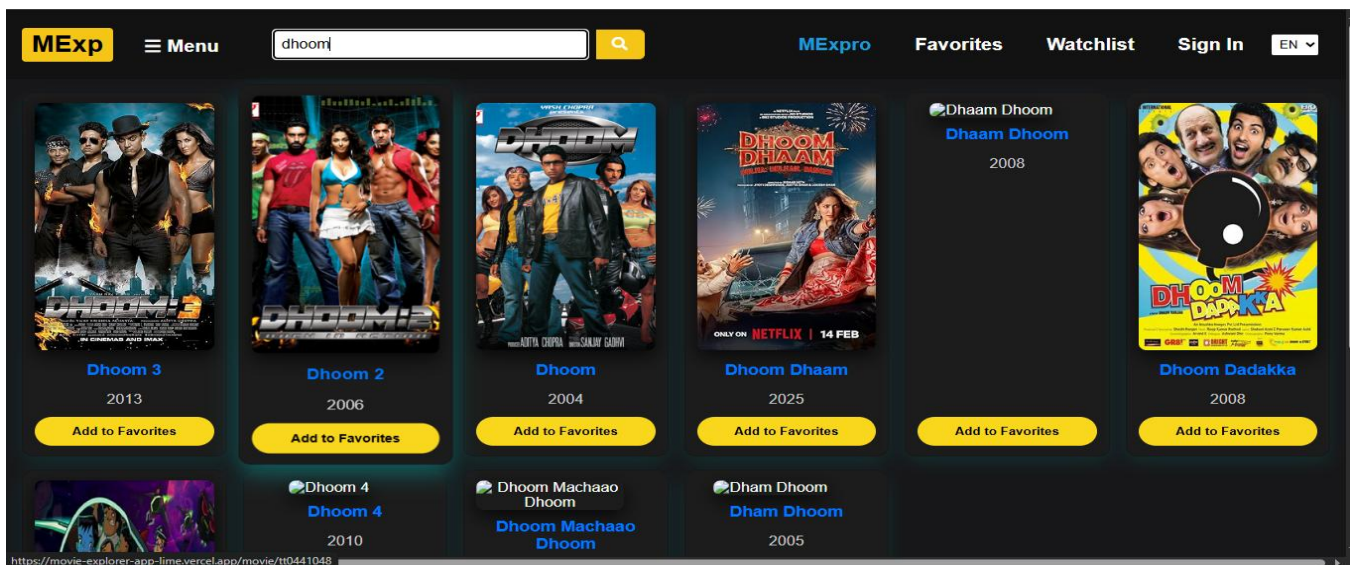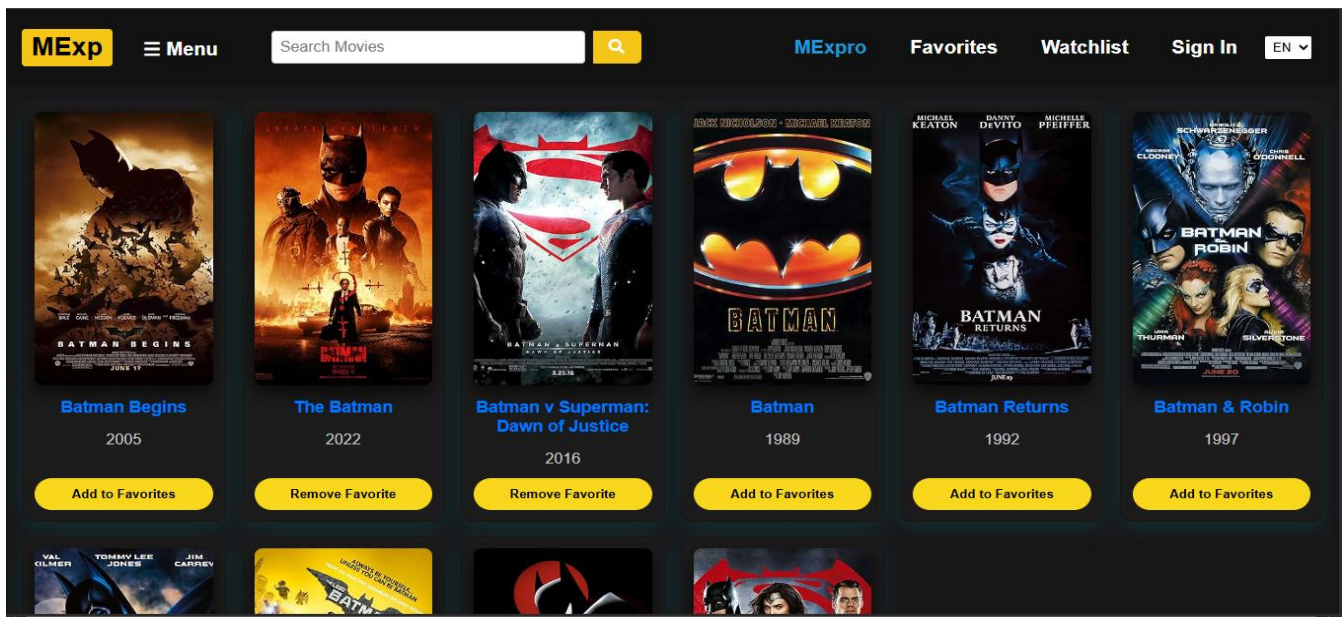
Your Favorites

Batman v Superman: Dawn of Justice

2016

Remove Favorite

The Batman

2022

Remove Favorite

Singham Again

2024

Remove Favorite

Vikram

2022

Remove Favorite

Batman v Superman: Dawn of Justice (2016)

Genre: Action, Adventure, Sci-Fi

Plot: Batman is manipulated by Lex Luthor to fear Superman. Superman´s existence is meanwhile dividing the world and he is framed for murder during an international crisis. The heroes clash and force the neutral Wonder Woman to reemerge.

Director: Zack Snyder

Actors: Ben Affleck, Henry Cavill, Amy Adams

IMDB Rating: 6.5

RESULT AND ANALYSIS

During my internship at Well Played Sports Pvt Ltd, I significantly enhanced my technical competencies and professional skills by working on real-world projects that involved full-stack web development. The experience offered a deep dive into both frontend and backend technologies, enabling me to develop robust, scalable features such as live score fetching, match data filtering, and dynamic leaderboard generation for cricket tournaments.

Working within an Agile environment using Jira as a task management tool, I collaborated with cross-functional teams including frontend developers, backend developers, QA testers, and business analysts. This collaboration helped me understand the end-to-end product lifecycle, from feature ideation to deployment. I consistently participated in sprint planning, daily stand-ups, and sprint reviews, improving both my time management and collaborative communication skills.

On the frontend, I used React.js to create responsive and reusable components for dynamic dashboards. On the backend, I developed RESTful APIs using Node.js, Express.js, MySQL, and MongoDB, incorporating best practices such as modular architecture, secure authentication, and optimized database queries. One of the key tasks involved implementing real-time match highlights and player statistics modules, which required tight integration with relational and NoSQL databases.

The project also helped me refine my skills in handling complex relationships between data entities, such as player profiles, match results, and tournament standings. My contributions led to improved data accuracy, reduced response times, and better overall user experience for coaches and players using the platform.

This internship not only strengthened my technical foundation but also gave me a greater understanding of user-focused development, code modularity, and agile methodologies. It affirmed my passion for building software solutions that solve real-world problems and contribute to business success.

Key Technologies and Skills Acquired:

- Frontend: React.js, HTML5, CSS3, JavaScript
- Backend: Node.js, Express.js
- Databases: MySQL, MongoDB
- APIs: RESTful API Design & Integration
- Authentication: JWT (JSON Web Tokens)
- Agile Methodology: Jira for sprint management
- Version Control: Git & GitHub
- Collaboration: Agile team communication and sprint planning
- Debugging & Optimization: Problem-solving in real-time data handling

This internship provided a strong foundation in full-stack application development and taught me how to deliver production-ready code within a professional environment. It marked a key milestone in my journey as a software developer, enhancing not only my technical toolkit but also my ability to work collaboratively, adapt quickly, and think critically in fast-paced development scenarios

CHALLENGES

During my internship at Well Played Sports Pvt Ltd, I encountered several challenges that tested my technical knowledge, adaptability, and teamwork skills. Each of these challenges ultimately served as an opportunity for personal and professional growth.

- **Hybrid Work Environment:**
  Operating in a hybrid work setting posed communication hurdles. Virtual meetings, Slack messages, and Jira comments sometimes lacked the clarity that face-to-face interactions offer. Understanding technical requirements, especially when working across time zones or with asynchronous feedback, required proactive communication and follow-ups with team members.
  .

- **Integrating Complex Data Structures:**
  One of the key challenges was handling and integrating complex relational data for real-time cricket analytics. Structuring APIs to fetch nested player statistics, match highlights, and leaderboard data across MongoDB and MySQL databases required in-depth debugging and schema optimization to ensure accuracy and performance.

- **Backend Performance Optimization:**
  Developing efficient APIs for live score tracking and leaderboard updates presented performance bottlenecks. Managing asynchronous operations, minimizing redundant queries, and ensuring real-time data sync across different components required multiple iterations and performance tuning.

- **Frontend Scalability & Reusability:**
  On the React.js side, creating scalable and reusable components for dynamic dashboards and match cards required careful planning. Achieving pixel-perfect alignment and responsiveness while handling edge cases such as incomplete data or delayed API responses was often challenging.

- **Time Management with Agile Sprints:**
  Working within Agile sprints while balancing multiple features and bugs was a new experience. Prioritizing tasks, estimating story points accurately, and managing unplanned updates (like client-side tweaks or urgent backend fixes) demanded careful time management and adaptability.

- **Version Control and Collaboration:**
  Collaborating on a shared codebase using Git and GitHub also presented challenges, such as resolving merge conflicts and maintaining consistent coding standards across the team. Learning how to rebase, squash commits, and write meaningful PR descriptions became essential skills.

Despite these challenges, they served as stepping stones that sharpened my problem-solving skills, improved my ability to work within a professional development environment, and taught me how to navigate complexity with composure and teamwork.

SKILLS USED

During my internship at Well Played Sports Pvt Ltd, I encountered several challenges that tested my technical knowledge, adaptability, and teamwork skills. Each of these challenges ultimately served as an opportunity for personal and professional growth.

- **Full Stack Development:**
  - **React.js Frontend Development:**
    Built reusable UI components for various modules, including tournament dashboards and player statistics. Developed pixel-perfect layouts and implemented dynamic routing using React Router.

  - **Node.js and Express.js Backend:**
    Gained proficiency in writing RESTful APIs to handle complex data operations such as live score updates, match highlights, and leaderboard statistics.

  - **Database Integration:**
    Worked with both MongoDB and MySQL to store and query structured and unstructured data, implementing efficient schema designs and optimizing queries for performance.

- **Sports Data Analytics Platform:**
  - **Live Score Fetching:**
    Contributed to building APIs that collect and serve live match data with minimal latency.

  - **Player and Tournament Filtering:**
    Implemented robust filtering mechanisms to dynamically display top players, match statistics, and tournament data.

  - **Match Highlights and Insights:**
    Developed features to extract and serve match highlights ball-by-ball, integrating with multiple tables and relational data.

- **Problem Solving and Debugging:**
  - **API Debugging:**
    Utilized tools like Postman and browser dev tools to debug complex API routes and ensure smooth data flow between frontend and backend.

  - **Performance Optimization:**
    Diagnosed and resolved issues like slow API responses and inefficient database queries, improving response times across endpoints.

- **Communication and Team Collaboration:**
  - **Agile Development & Jira:**
    Worked within Agile sprints, updating tickets, tracking progress, and participating in sprint planning and daily stand-ups.

  - **Cross-Functional Coordination:**
    Collaborated closely with designers, senior developers, and QA testers to ensure the features met functional and user experience requirements.

- **Continuous Learning and Adaptability:**
  - **New Tools & Libraries:**
    Adapted quickly to using new tools like Jira for issue tracking, GitHub for version control, and various npm libraries for development efficiency.

  - **Backend-Frontend Sync:**
    Learned to ensure proper request/response handling between React components and backend routes, maintaining API contracts and state management.

- **Documentation and Reporting:**
  - **Code Documentation:**
    Maintained clean and well-documented code to ensure readability and ease of handoff.

  - **Project Updates:**
    Shared regular progress updates and demoed features to mentors and team leads, learning how to communicate technical work effectively to non-technical stakeholders.

By overcoming these challenges, I enhanced my technical capabilities as a Full Stack Developer and learned the importance of clear communication, collaboration, and agile adaptability in a fast-paced development environment.

CONCLUSION

In conclusion, my internship at Well Played Sports Pvt Ltd has been a highly rewarding and transformative phase in my professional journey. Working as a Backend Developer Intern in a dynamic, real-world development environment enabled me to apply my technical knowledge in full stack development while contributing meaningfully to a high-impact sports analytics platform.

The hands-on experience with Node.js, Express.js, React.js, MongoDB, and MySQL not only deepened my understanding of web development technologies but also strengthened my problem-solving and debugging skills. Developing RESTful APIs, working with complex database schemas, and contributing to features like live score tracking, match highlights, and player statistics gave me a strong foundation in scalable application development.

Collaborating within a cross-functional Agile team and using tools like Jira, Postman, and GitHub taught me industry best practices and highlighted the importance of effective communication, version control, and iterative development. These experiences refined my ability to work in a team setting, manage tasks efficiently, and deliver results within deadlines.

The challenges I faced throughout the internship—from optimizing performance to syncing frontend and backend components—allowed me to grow both technically and personally. Each task reinforced the importance of writing clean, maintainable code and understanding user needs to build responsive, intuitive interfaces.

Overall, this internship has solidified my commitment to becoming a proficient Full Stack Developer. It has equipped me with a versatile skill set that I am confident will provide a strong competitive edge in the rapidly evolving field of web development and beyond.

GUIDE SUPPORTS (INTERNAL, EXTERNAL)

Throughout my six-month internship period, both internal and external guides played crucial roles in ensuring my successful completion of the program and professional development. Their continuous support, guidance, and mentorship were instrumental in overcoming challenges and achieving the internship objectives.

Internal Guide Support:

Prof. Mahendra Sawane - Internal Guide My internal guide, Prof. Mahendra Sawane, provided exceptional support throughout the entire internship duration. His guidance was invaluable in bridging the gap between academic learning and industry application.

- Key Contributions:
- Academic Coordination: Ensured smooth coordination between college requirements and industry experience
- Regular Monitoring: Conducted regular check-ins to monitor progress and address any academic concerns
- Documentation Support: Provided guidance on maintaining proper documentation and report preparation
- Problem Resolution: Always available to address doubts, queries, and challenges faced during the internship
- Evaluation Support: Assisted in understanding evaluation criteria and ensuring all academic requirements were met

Mentorship Approach:

Prof. Sawane demonstrated genuine interest in my professional growth and consistently showed support during challenging phases of the internship. His approachable nature made it easy to discuss concerns and seek guidance whenever needed. The regular meetings and feedback sessions helped maintain focus on both learning objectives and practical contributions.

External Guide Support:

Mr. N K Singh - External Guide (Industry Mentor) My industry mentor, Mr. N K Singh, at Atorix IT Solutions played a pivotal role in my technical and professional development. His expertise and practical insights significantly enriched the overall learning experience.

Technical Guidance:

- Project Leadership: Provided comprehensive guidance on the Connecting Dots ERP project requirements and objectives
- Technology Mentorship: Shared expert knowledge on React.js to Next.js migration and modern web development practices
- Code Review: Conducted regular code reviews and provided constructive feedback for improvement
- Best Practices: Taught industry-standard development practices and professional coding standards
- Problem-Solving: Guided me through complex technical challenges and debugging processes

Professional Development:
- Industry Insights: Shared valuable perspectives on web development industry trends and career opportunities
- Real- World Application: Helped understand how theoretical knowledge applies to practical business solutions
- Project Management: Provided insights into professional project management and team collaboration Quality Standards: Emphasized the importance of maintaining high-quality code and documentation standards

Collaborative Approach:

Mr. N K Singh involvement went beyond traditional mentorship, offering practical advice and real-world perspectives that were instrumental in project success. His guidance helped me develop a broader understanding of industry expectations and strengthened my problem-solving capabilities.

Collaborative Support Framework:

Academic-Industry Coordination: The coordination between internal and external guides created a comprehensive support system that addressed both academic requirements and industry expectations:
- Regular Communication: Both guides maintained regular communication to ensure alignment of learning objectives
- Progress Monitoring: Systematic monitoring of both technical progress and academic milestones
- Feedback Integration: Combined feedback from both academic and industry perspectives for holistic development
- Resource Sharing: Access to both academic resources and industry tools and technologies

Team Support at Well Played Sport:

Beyond the primary external guide, the entire development team at Well Played Sport contributed to my learning experience:
- Senior Developer Mentorship: Other senior developers provided additional technical guidance and code review
- Peer Learning: Collaboration with fellow developers enhanced learning through knowledge sharing
- Project Stakeholder Interaction: Exposure to interaction with project stakeholders and clients
- Professional Environment: Immersion in a professional development environment with industry standards

Impact of Guide Support:
- Technical Development: The combined guidance from both internal and external guides resulted in:
- Accelerated Learning: Faster acquisition of complex technical skills through expert mentorship
- Quality Assurance: Maintenance of high standards in code quality and project deliverables
- Best Practices: Understanding and implementation of industry-standard development practices
- Problem-Solving Skills: Development of systematic approaches to technical challenges

Professional Growth:

The mentorship provided significant contributions to professional development:

- Communication Skills: Enhanced technical communication and professional interaction capabilities
- Time Management: Improved ability to manage project deadlines and academic requirements
- Team Collaboration: Developed effective collaboration skills in professional environments
- Career Guidance: Valuable insights into career paths and professional development opportunities

Academic Success:

The support framework ensured successful completion of academic requirements:

- Documentation Standards: Proper maintenance of internship documentation and reports
- Learning Objectives: Achievement of all academic learning objectives through practical application
- Evaluation Preparation: Thorough preparation for academic evaluation and assessment
- Knowledge Integration: Effective integration of practical experience with academic learning

Acknowledgment and Gratitude:

The success of this internship would not have been possible without the dedicated support and guidance from both Prof. Sadashiv Badiger and Mr. N K Singh. Their combined mentorship created an ideal learning environment that fostered both technical expertise and professional growth.

The collaborative approach between academic and industry guides provided a comprehensive learning experience that exceeded expectations and prepared me for future challenges in web development and software engineering. Their continued support and encouragement were instrumental in building confidence and achieving the internship objectives successfully

IMAGES
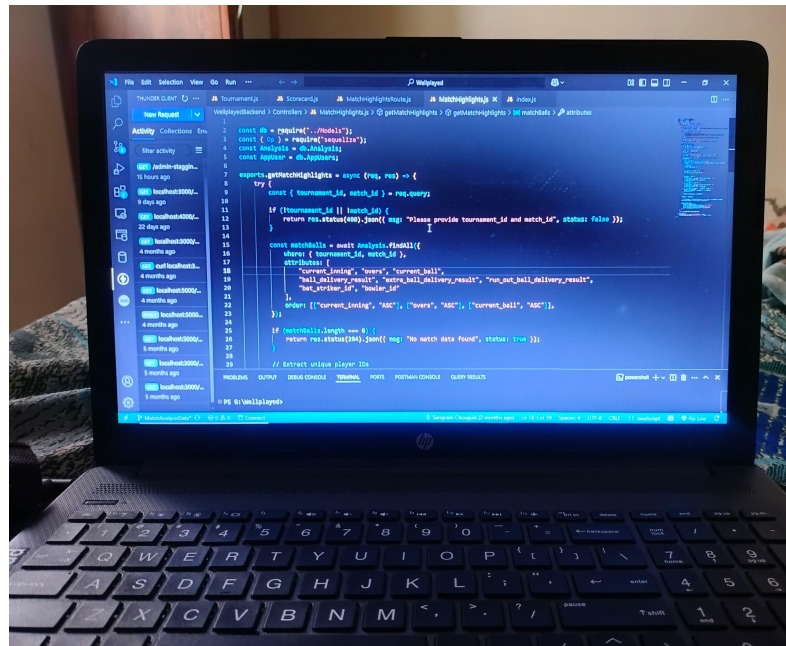
INTERNSHIP OFFER LETTER

Internship Letter

Subject – Offer Letter for Internship with Drona Well Played Sports Private Limited

This letter is to certify that **Sangram Chougule** have been selected as Intern (Technology and Product Development) for 'Drona Well Played Sports', a start-up incubated by the IIMN Foundation for Entrepreneurship Development (InFED).

1. **Nature of Work:** You will be working as an Intern in Technology and Product Development track or any other duties assigned to you by the Start-up during the period of your engagement
2. **Internship Duration:** The internship will start from **15January 2025.**
3. **Working Hours:** 6 hours / day and 5 days a week (Mon-Fri 1130-1800)

Subject to the Terms & Conditions mentioned below:
Liability:
1. The candidate has to ensure that he/she has a valid 'Driving License, Vehicle Insurance and other important documents required as per law for driving a vehicle. Drona Well Played Sports would not be responsible for any kind of harm caused to the 'appointed candidate'.
2. This opportunity for the selected candidate is only limited to this engagement and does not in any way make the candidate eligible for an employment with Drona Well Played Sports.
Termination of engagement:
1. Drona Well Played Sports may terminate your engagement based on 2 weeks' notice.

Please acknowledge the offer by signing a photocopy of the same.

Congratulations on your achievement and all the best.

Regards,
Ketan Kaore

Director
Drona Well Played Sports Private Limited

INDUSTRY FEEDBACK FORM

6 MONTH INTERNSHIP CERTIFICATE