B.Tech 6th Semester Minor project presentation

"SPORTS MANAGEMENT SYSTEM"

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Abstract

Abstract

"SportConnect" is a Sprots Management System which manages the activity of many Sports at a time. It also manages the selection events for students into universities. Using "SportConnect" a user complete their registration process in a quick manner compared to manual process. This system also provide the information collectively of all ongoing and upcoming sports event throughout the University.

Introduction

- SportConnect is a Web based application where student can find the details of various games and the information of the collage and when the games are being conducted
- Admin will add all the collected information in the system where student can see and get register for the game

The different process to be used for our project is:

1. Student

2. Registration

3. List of events

4. No. of registered student

5. Admin

6. Event schedule

7. Point's calculation

8. Feedback

System Architecture

- The platform consists of three main components: the front end, the back end, and the database. The platform follows a client-server architecture, with the front end serving as the client and the back end and database serving as the server.
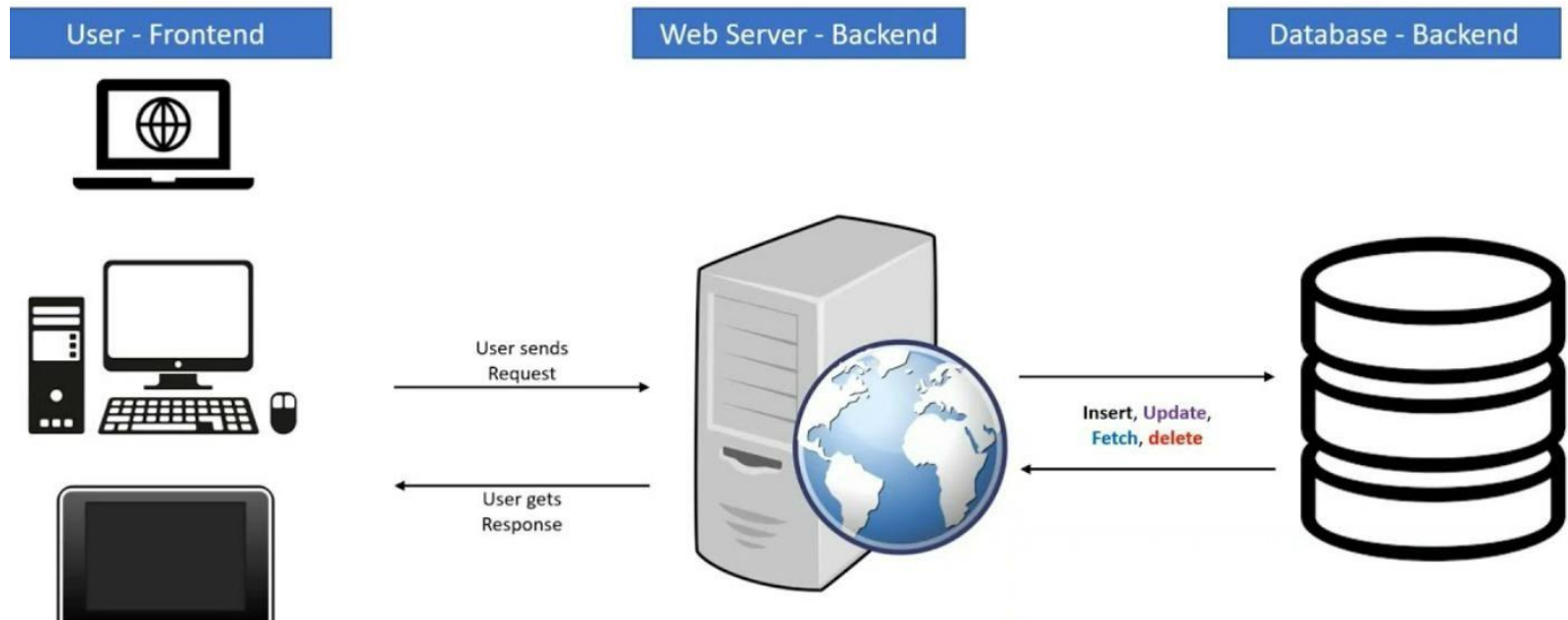
Front-end

- To build the front end, we use frameworks and libraries such as ReactJS, which is a popular JavaScript library for building user interfaces. ReactJS allows for the creation of dynamic and responsive user interfaces.

- We also use CSS and Tailwind, which are styling frameworks that help make the user interface look good and responsive. Additionally, we use some npm packages to add extra functionality to the front end.

- The front end communicates with the back end using API calls.

Back-end

- The backend of the platform built using Express.js, and MongoDB as the primary database.

- Express.js is a back end web application framework for building APIs with Node.js

- MongoDB is a popular NoSQL database that allows for flexible data storage and retrieval, making it a suitable choice for complex applications like LMS.

Functionalities of backend:

1. User authentication and authorization
2. Event management
3. Payment Integration
4. Cloud-based media management

Database

- The database for the platform is built using MongoDB, which is a NoSQL database that provides a flexible and scalable data storage solution. MongoDB allows for the storage of unstructured and semi-structured data, which is useful for storing course content such as videos, images, and PDFs.

- The database stores the course content, user data, and other relevant information related to the platform.
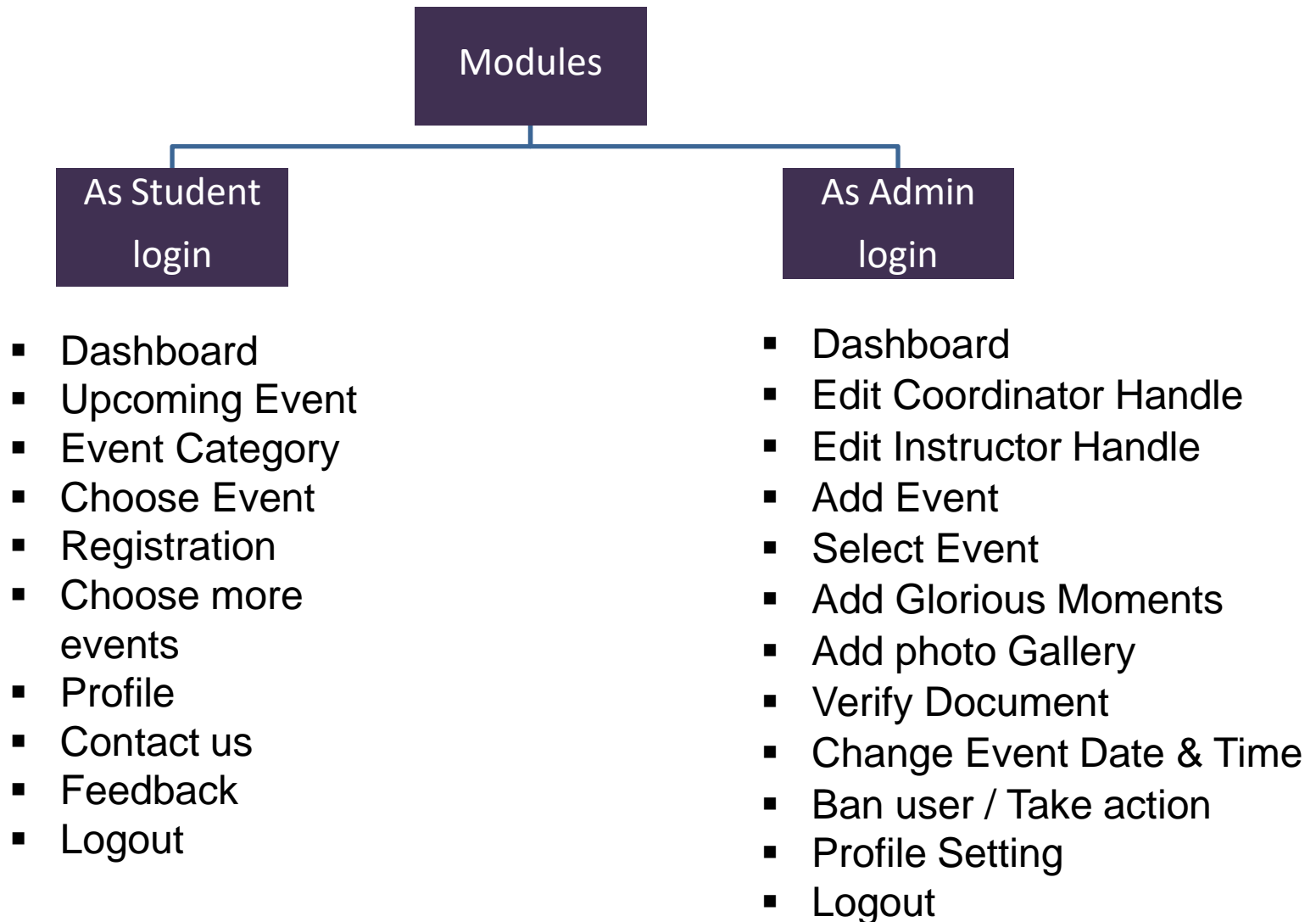
Problem Statement

- Nowadays demand of sports have increased gradually, with this the management of these sports events becomes a serious challenge. In the current situation to manually manage a sport event successfully there are many challenges and lots of data.

- For conducting an event there are too many processes like gather information, registration, verification etc. and if an athlete wants to participate in more than one event then it will be very difficult for that athlete to take part in another sport event and unfortunately he/she misses chance and also this will take more time and energy.

- Also there is less communication and promotion of all sports event at a time in manual process as a result many students misses chance to get participated in the event. Because of less communication sometimes date of registration passes and the efforts made to organize the event wasted as no. participants is less.

Methodology

1. **Platform Requirements Gathering**: Technical Requirements and Content Requirements.

2. **Designing the Platform**

3. **Technology Stack Selection**: Choose the appropriate technology stack for development.

4. **Platform Development**: To develop platform we will use Incremental Model

5. **Testing:** To identify and fix bugs

6. **Launch the Platform**

7. **Feedback Collection**: Collect user feedback and analytics to identify areas for improvement.

8. **Improvements:** Improvements according to user feedback
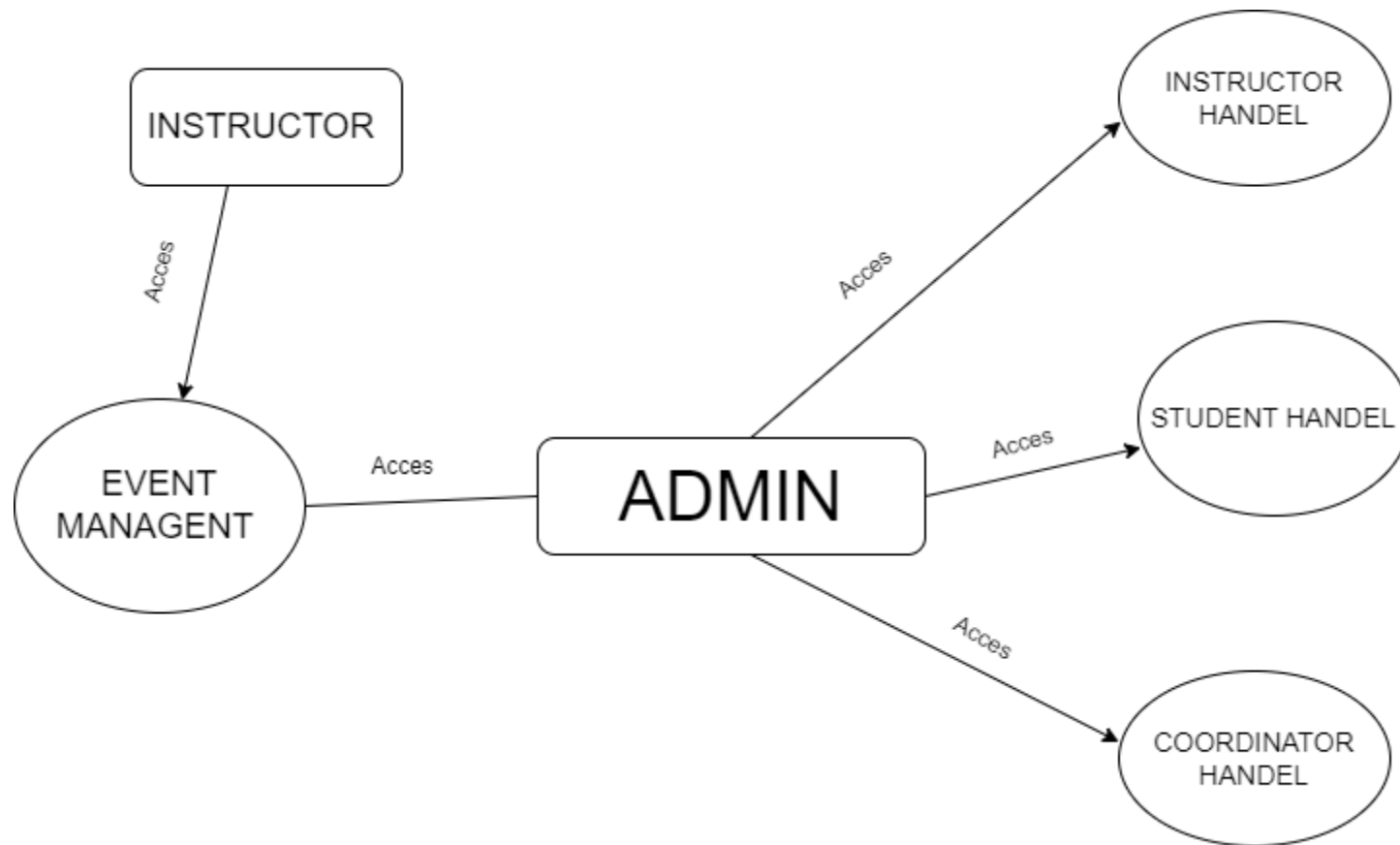
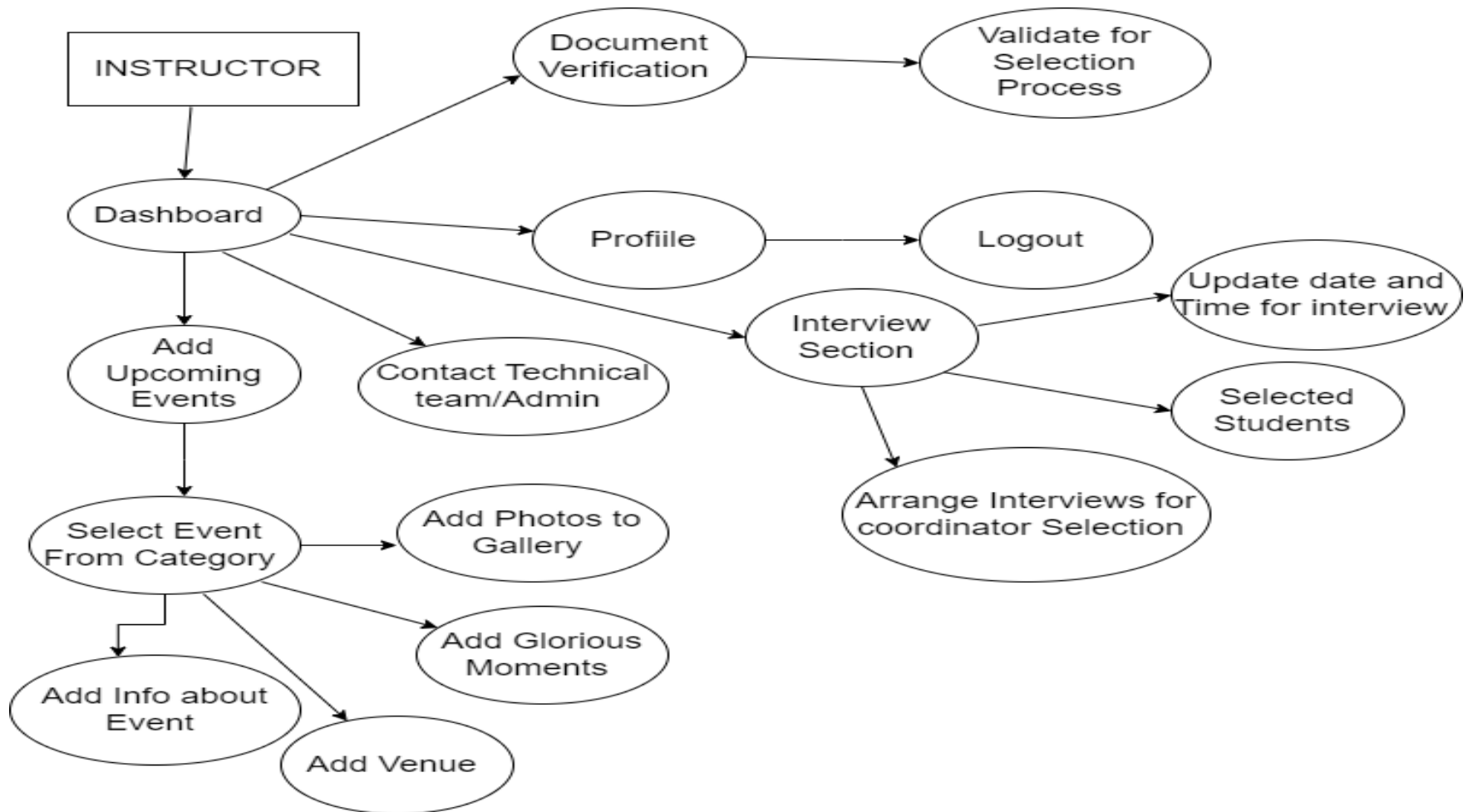9. **Continuous Monitoring and Maintenance**:

Modules

```
Modules
├── As Student login
└── As Admin login
```

As Student login

- Dashboard
- Upcoming Event
- Event Category
- Choose Event
- Registration
- Choose more events
- Profile
- Contact us
- Feedback
- Logout

As Admin login

- Dashboard
- Edit Coordinator Handle
- Edit Instructor Handle
- Add Event
- Select Event
- Add Glorious Moments
- Add photo Gallery
- Verify Document
- Change Event Date & Time
- Ban user / Take action
- Profile Setting
- Logout

Use Case

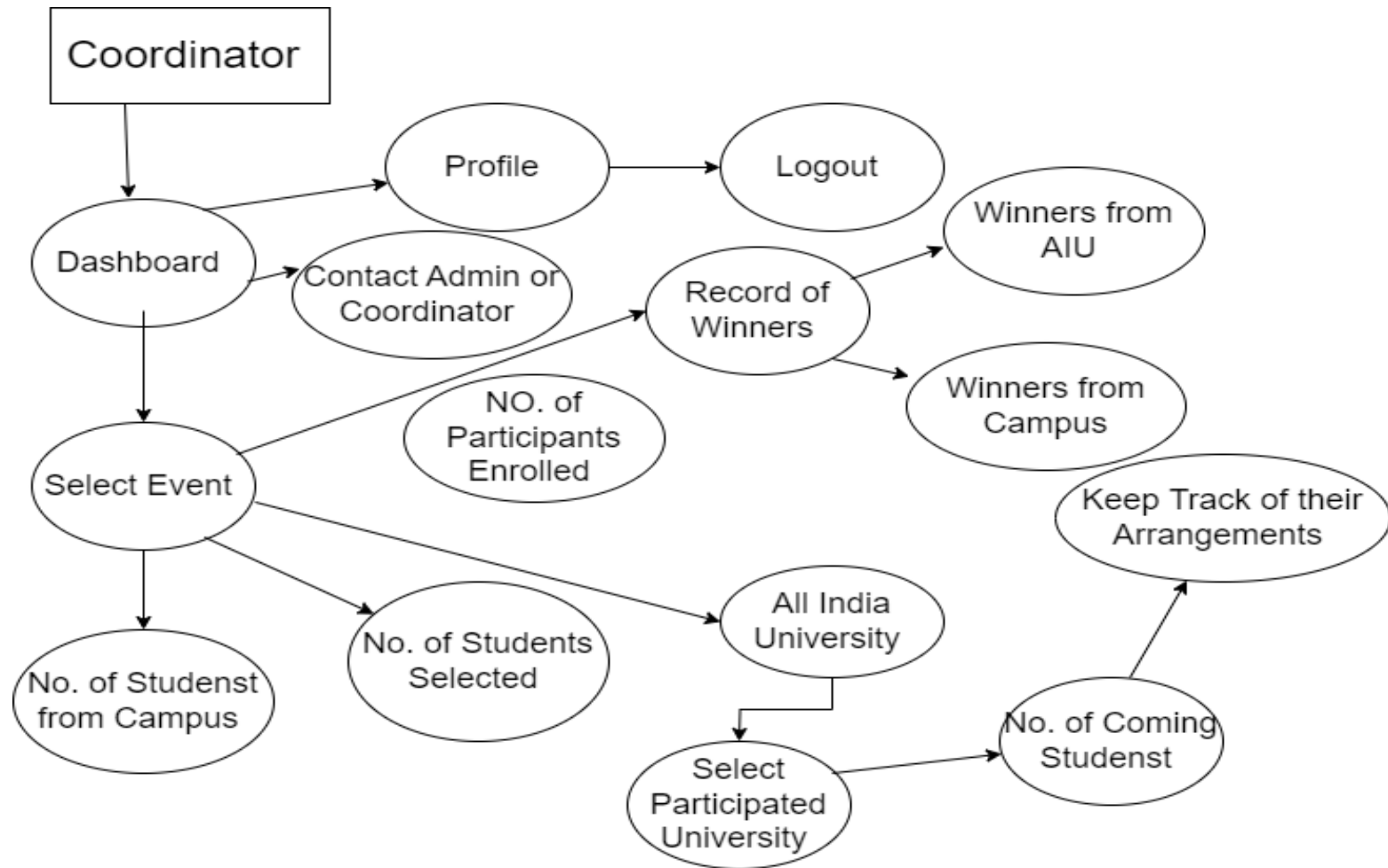## Use Case: Administrator

Use Case
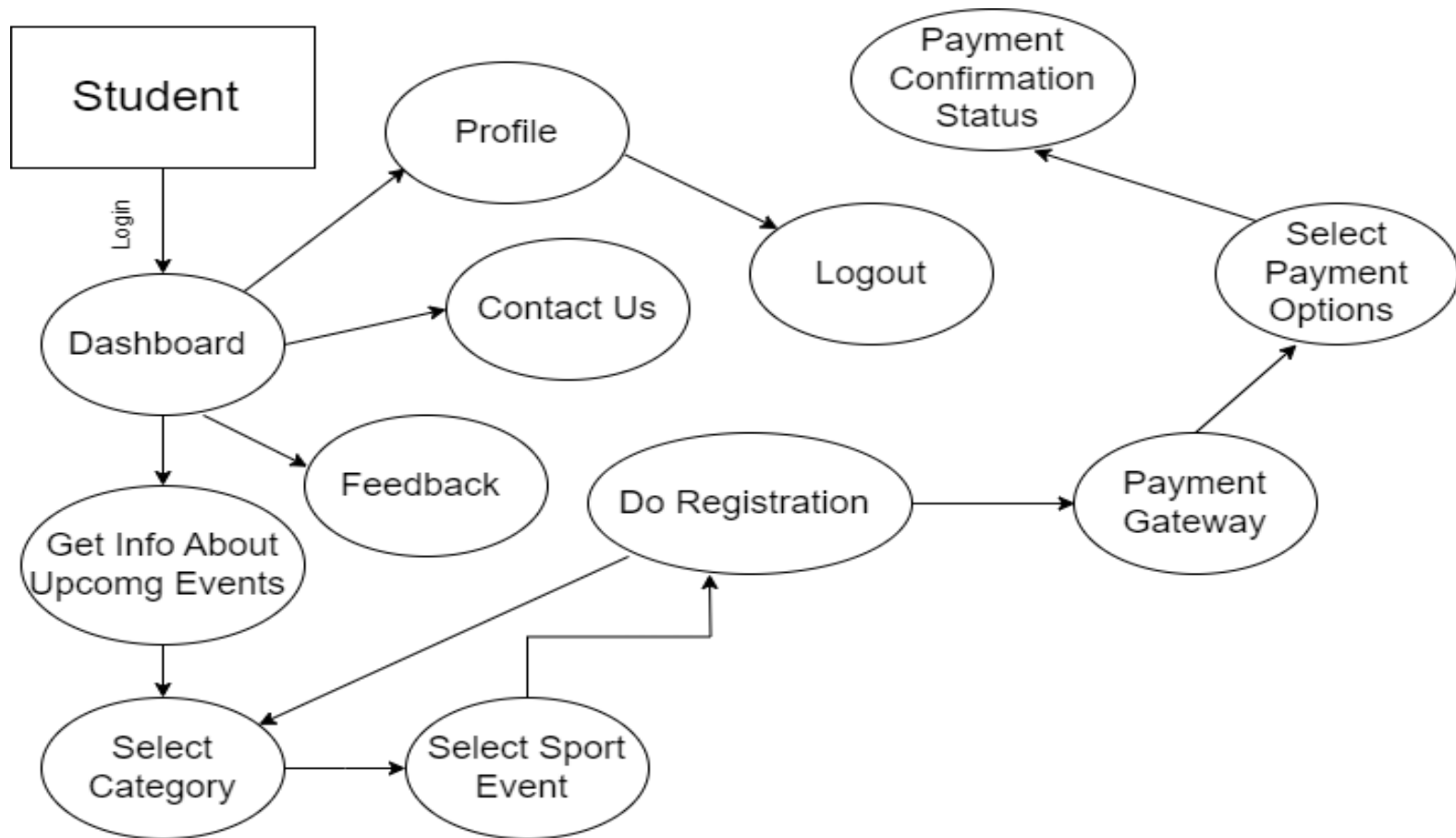
Use Case: Instructor

Use Case

Use Case: Coordinator

Use Case

Use Case: Student

Hardware & Software Requirement

Hardware (PC) System Requirements:

- Processor: Intel core i3-4130 or better
- System bus: 32 bits
- RAM: 256MB or more
- Storage: 5GB or more
- Speaker

Minimum Software Requirements:

- Operating System: Windows 2000 or higher with latest updates installed
- Internet Connection: Connection with 500+ Kbps
- Mobile: Safari in Apple iOS 8+, Google Chrome in Apple iOS 8+, Google Chrome in Android OS 4.1+

Outcomes

The expected outcomes of SportsConnect :

Efficient Operations:

- Streamlined scheduling of events, practices, and facilities.
- Automation of administrative tasks, reducing paperwork and manual efforts.
- Improved communication among coaches, athletes, and staff.

Enhanced Player Performance:
- Access to performance data and analytics for athletes.
- Tailored training programs based on individual performance metrics.
- Injury prevention through monitoring and analysis of player health.

Fan Engagement:
- Increased fan interaction through mobile apps, social media, and online platforms.
- Real-time updates, scores, and statistics accessible to fans.
- Personalized experiences for fans, such as loyalty programs and exclusive content.

Limitations

Initial Implementation Costs:

- Setting up a comprehensive sports management system can involve significant upfront costs for software, hardware, and training.

Integration Challenges:

- Integrating the system with existing technologies and databases may be challenging and time-consuming.

Resistance to Change:

- Users, including athletes, coaches, and staff, may resist adopting new technologies, leading to a slower implementation process.

Technical Issues:

- Like any software, sports management systems can face technical glitches, downtime, or compatibility issues.

Data Security Concerns:

- Storing and managing sensitive player and organizational data raises concerns about privacy and the potential for security breaches.

Conclusion

SportConnect is a web base application which is a creation and development of event. The system will take care of all the servicing activity in quick manner. Data storing easier, it will be able to check any report at any time. Paper work and physical work is reducing through this system. The system is user friendly and easy to use it will consume less amount of time. System can be used to manage sports event smoothly and better sport can be conducted in sport weekend.

Future Work

Future Enhancements:

The future of sports management systems will likely involve a convergence of technological innovations, data-driven insights, and a commitment to improving the overall experience for athletes, coaches, organizations, and fans. As technology evolves, these systems will play a crucial role in shaping the future of sports management and administration.

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THANK YOU