AuctionAI
Advanced Technology Assistive Online Auction Platform

FYP Proposal

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Supervisor

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Group Introduction

Group Members

- Muhammad Umair
- Bismah Imran
- Maham Mirza

Supervisor: Osama Ahmed Khan

Why we selected him as supervisor?

He has already been developed/supervised couple of similar industry-academia project in the recent past, namely as "Health Bot" ,"Carrier Trial" and "NFT Auction website using Web 3.0 ". The project idea, problem domain, and project scope, is very much alike and related to his skills set. We believe that he can provide valuable guidance and mentorship throughout the project.

Relevant Expertise

He has experience in similar domain and industry project which is related to our project.

Relevant Experience

He has 8+ years of prolific experience in academia and 12+ in industry.

Online Auction System

Problem Statement

"**Employing assistive technology** to address traditional auction **longstanding challenges** and **enhance user experience**"

Existing online auction platforms marred by outdated technology, limited scalability, and inherent security concerns, which not only undermine user trust but also hinder transactional reliability and overall user experience. Also, lack robust features to handle complex bidding dynamics. These shortcomings highlight the pressing need for a modernized online auction solution that leverages cutting-edge technologies to overcome these challenges and enhance the overall efficiency and trustworthiness of the auction process.

Project **Introduction**

Auctionai stands at the forefront of innovation in online auction platforms, pioneering a new era of technological integration. By harnessing advanced tools such as AI, ML, Auctionai redefines the auction experience, offering users intuitive interfaces, enhanced security protocols, and immersive bidding environments. Our platform not only ensures seamless transactions and real-time valuation accuracy but also fosters a dynamic marketplace where users can engage confidently in buying and selling a wide range of items. Join us in revolutionizing online auctions with cutting-edge technology and unparalleled user-centric features.

Project **Objectives**

- Enhance User Experience

- Optimize Auction Efficiency and Profitability

- Promote Accessibility and Convenience

- Expand Market Reach and User Base

- Foster Trust and Reliability

- Predictive Analytics
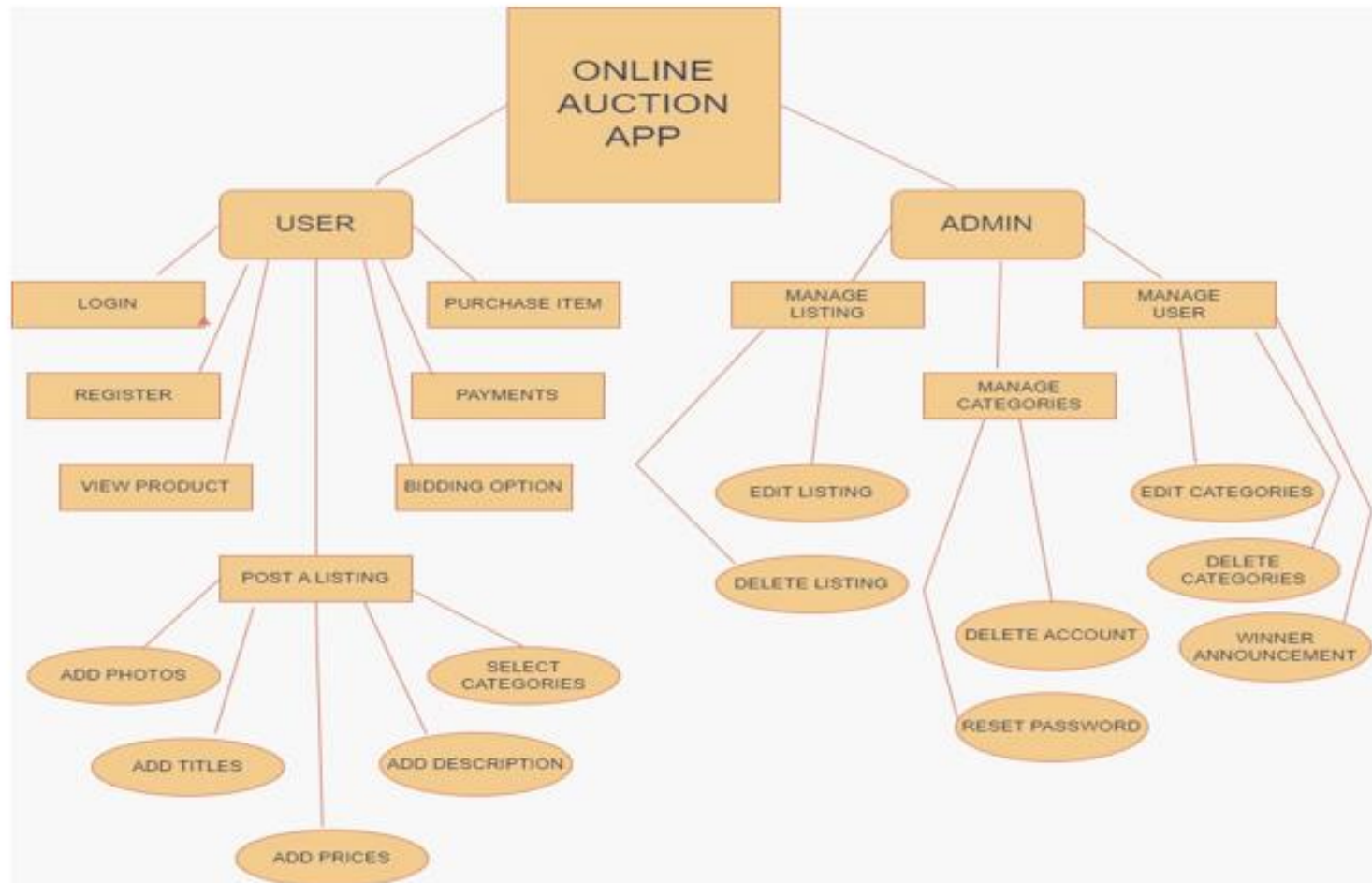
- Advanced Fraud Detection

Project **Scope**

The scope of the project "Auctionai" encompasses the design and development of an advanced online auction platform that technologies to deliver a seamless and engaging user experience. It equip with feature functionalities; AI-powered auctioneer for dynamic management of auctions, real-time bidding with live updates, and voice-activated bidding capabilities. While personalized user interfaces based on AI-driven insights will cater to individual user preferences. Also includes secure payment gateway integration, comprehensive search and filtering options, seller tools for listing management, and buyer tools for tracking bids and favorite items. **Rest else are not part of project**

Architecture Big Picture

Agile Development Methodology

WHY?

The Agile Model is appropriate due to its iterative and flexible nature, which allows for continuous feedback, adaptation to changing requirements, and incremental delivery of functional components. This approach aligns well with the project's objectives of integrating behavioral compliance with cybersecurity measures, fostering security awareness, and ensuring the platform's effectiveness through empirical evaluation and user feedback.

Project **Role** & **Responsibilities**

Task/Activity	M.Umair	Bismah Imran	Maham Mirza	Ms Madeeha Zaidi
Project Initiation and Preparation	R	R	A	C,I
Competitive Analysis	A	R	R	C,I
Design and Prototyping	R	R	A	C,I
Design & Develop Database	R	A	R	C,I
Design & Develop Mobile App	A	R	R	C,I
Testing and Optimization	R	R	R	C,I
Design Assessments	R	A	R	C,I
Documentation and Launch Preparation	R	R	R	C,I
Project demonstration	R	R	R	C,I

Project **Plan**

Phases/Activity	Duration
Project Initiation and Preparation	2 weeks
Competitive Analysis	4 weeks
Design and Prototyping	2 weeks
Design & Develop Database	6 weeks
Design & Develop Mobile App	12 weeks
Testing and Optimization	8 weeks
Design Assessments	6 weeks
Documentation and Launch Preparation	4 weeks
Project demonstration	8 weeks
Total Estimated Duration	**52 weeks**

Project **Budgeting**

Estimated budget of project major resources

- Laptop (Rs. 150,000 x 3 = PKR 450,000 est.)

- Electricity (Rs. 5000 x 12 = PKR 60,000 est.)

- Internet (3000 x 12 = PKR 36,000 est.)

- Mobile (42,000 x 2 = PKR 42,000 est.)

- Industry Expert Consultancy (expected 2-4 visits) 8000 x 2 = PKR 16,000 est.

- LaserJet Printer 16,000

- Miscellaneous PKR 10,000 est.

Total cost PKR 630,000 est.

*Detailed budget sheet will be provide.

Project **Tools**

Software Requirements

- **Frontend:** HTML5, CSS3, JavaScript (React.js for dynamic interfaces).

- **Backend:** Node.js or Python (Django/Flask) for server-side logic and API development.

- **Database:** MongoDB for data storage and management.

- **AI/ML Integration:** TensorFlow or PyTorch for machine learning models.

- **AR/VR Development:** Unity 3D for virtual environment creation (if applicable).

Hardware Requirements

- Laptop (Multi-Core, i9, 16GB, 500GB SSD)

- Backup Hard drives

- Internet

- Printer

- Mobile (for testing)

Project **Deliverables**

FYP-I Evaluation

- Project Plan
- SRS / SDS
- Project Budget
- Database Design
- Mobile Prototype
- Project Report – I
- Research Paper (First draft optional)

FYP-II Evaluation

- App Demo & Display
- Poster
- Project Report – II
- Research Paper (Final draft - Optional)

THANK YOU!