1. **Product Vision**

Our online auction platform aims to revolutionize the way both individuals and companies use auctions for buying and selling. Our automated, secure, and responsive environment facilitates smooth transactions between buyers and sellers. We want to be at the forefront of the online auction industry, enabling anyone, anywhere, to participate in auctions with features like payment verification, automated notifications, and a feature-rich admin dashboard.

**Purpose & Long-Term Goals** : The goal of our platform is to establish a reliable, user-friendly auction environment where buyers can participate in open, competitive bidding and sellers can list items with confidence. The ultimate objective is to emerge as a preeminent worldwide auction platform, renowned for its inventiveness, effectiveness, and security. Our goal is to make online auctions simple, safe, and available to everyone

**Target Audience :** Our marketplace caters to a broad spectrum of consumers, such as those wishing to purchase or sell uncommon or everyday goods, small companies looking to sell goods at auction, and expert auctioneers seeking a digital way to prolong their live events. The platform's user-friendly design and accessibility to a wide range of users guarantee seamless experiences for both inexperienced users and seasoned sellers.

**Key Features :** The platform enables users to participate in auctions from any location with its responsive user interface, which functions flawlessly on desktops and mobile devices. Users can easily monitor profiles, track auction histories, and manage bids in real-time. An extensive admin dashboard gives administrators the resources they need to effectively manage users, auctions, and payments. To improve user experience and expedite processes, important tasks like bid alerts, payment confirmations, and auction scheduling are also provided.

**Future Vision :** In order to make auctions available to everyone, we plan to grow the platform internationally in the future. This will include support integrations with the real-time payment gateways and also supports numerous languages, currencies, and international payment methods. Our goal is to use AI to provide dynamic pricing, individualized bidding recommendations, and improved user interaction. Furthermore, we intend to provide API integrations with well-known e-commerce platforms, enabling users to easily auction their goods across numerous channels and extending the platform's reach.

**2. Product Road Map, detailed map**

| **Week** | **Tasks** |
| --- | --- |
| **1** | SPRINT 1 : Project Setup & Initial Planning   SPRINT 1 : Development Environment Setup |
| **2-4** | SPRINT 1 : UI/UX Research & Design  SPRINT 1 : Wireframing |
| **5** | SPRINT 2 : Define User Stories  SPRINT 2 : Create Workflow Diagrams  SPRINT 2 : Technical Specifications & Task Allocation |
| **6-7** | SPRINT 3 : Backend Development   * Setting up DB * User Authentication   SPRINT 3 : Frontend Development – Part 1   * Landing page * Login page for both admin and the users * Basic Admin Dashboard * Home page for seller and bidder |
| **8-9** | SPRINT 4 : Frontend Development – Part 2   * Seller and bidder profile page * Create auction for an item webpage (Seller) * Modify item specifications page (Seller) * Live auction view page (Bidder) |
| **10** | SPRINT 4 : Integrate Frontend with Backend   * Develop Responsive UI Components * Backend side implementation of Auction & Bid Management * Enable Notifications |
| **11** | SPRINT 5 : Product Testing |
| **12** | SPRINT 5 : Deployment & GO LIVE |

**3. Product Release**

| **Release** | **Focus** | **Key Deliverables** |
| --- | --- | --- |
| **Release 1** | Finalizing core functionalities and validating the scope of these functionalities. | UI/UX designs of all the webpages |
| **Release 2** | Develop prototype of all the core functionalities and set up integration between frontend and backend. | User authentication, real-time bidding feature, allow seller to make changes to the posted auction item, profile management, enable admin to monitor auction activities. |
| **Release 3** | Full platform release to public users. | Testing and hosting the fully functional auction system application on a public webserver. |

**4. JIRA**

* [**JIRA BACKLOG DASHBOARD**](https://pvasanta.atlassian.net/jira/software/projects/BYW/boards/5/backlog)

**5. GITHUB**

* [**GITHUB REPOSITORY**](https://github.com/poornasaiv/Bid-Your-Way)

**5. LANGUAGES & TOOLS**

|  |  |
| --- | --- |
| **Language/Tool** | **Description** |
| **MongoDB (NoSQL)** | Database management system used for storing and retrieving unstructured data as collections of documents, enabling high flexibility and scalability for handling large datasets. |
| **Express JS** | Backend web application framework for Node.js, used to build APIs and handle routing, middleware, and HTTP requests. It simplifies the development of server-side functionality. |
| **React JS** | Frontend JavaScript library used for building user interfaces, particularly single-page applications (SPAs). It allows the creation of reusable UI components and handles dynamic rendering of web content. |
| **Node JS** | JavaScript runtime environment that allows running JavaScript on the server-side, used for backend development, enabling event-driven, non-blocking (asynchronous) programming. |
| **JIRA** | Project management tool used for tracking tasks, managing project workflows, and coordinating collaboration across teams, particularly in agile development environments. |
| **GIT** | Version control system used to track changes in source code, enabling collaboration between multiple developers by managing branches and merging code changes. |
| **GITHUB** | Cloud-based hosting service for Git repositories, used for managing, sharing, and collaborating on projects. It provides tools for version control, pull requests, and issue tracking. |
| **POSTMAN** | API testing tool used to develop, test, and debug RESTful APIs, allowing users to send HTTP requests and analyze responses, ensuring proper API functionality. |
| **VS Code** | Source code editor widely used for writing and editing code. It supports a multitude of programming languages and offers extensions for debugging, version control, and enhancing productivity. Its integrated terminal and rich ecosystem make it a preferred choice for developers. |
| **Cloudinary** | Cloud-based service for managing and delivering media assets (images, videos) in web applications. It provides features like image and video optimization, transformation, storage, and seamless integration with frontend and backend technologies, enhancing the performance and user experience of applications. |
| **Amazon Web Services (AWS)** | AWS is a comprehensive cloud platform offering scalable, reliable infrastructure for deploying applications, managing databases, handling authentication, and ensuring security. It provides services like EC2 for computing, S3 for storage, RDS for databases, and Lambda for serverless computing, enabling the development and maintenance of robust full-stack applications |

**6. INITIAL TASK/ROLE LIST**

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** | **Duties** |
| **Anvith Paturu** | **Full Stack Developer, UI/UX Designer** | - Design and implement front-end interfaces and back-end services. - Develop UI/UX components, ensuring a user-friendly design. - Integrate APIs and manage data flow between server and frontend. |
| **Poorna Sai Vasanta** | **Project Manager, Full Stack Developer** | - Lead and coordinate the project, ensuring timely delivery. - Manage the project timeline, milestones, and communication between teams. - Contribute to both front-end and back-end development, overseeing key technical decisions. |
| **Surya Sindhu Govindu** | **SCRUM Master, UI/UX Designer, Frontend Developer** | - Facilitate daily stand-ups, sprint planning, and retrospective meetings. - Remove obstacles that may impede the team's progress. - Design and create responsive user interfaces with a focus on UX. - Oversee CI/CD pipelines, ensuring smooth code deployment and release processes. - Manage infrastructure automation, system monitoring, and configuration. - Ensure seamless integration between development and operations teams. |
| **Sravan Kumar** | **Backend Developer, QA Engineer, Database Admin** | - Develop and maintain the back-end services and APIs. - Manage databases, ensure performance and security. - Conduct testing and debugging of back-end logic and database operations. - Perform data migrations and backups. |