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| **Level** | **WBS** | **Task Description** | **Timeline** | **Notes** |
| 1 | 1 | **Team and idea formation** |  |  |
| 2 | 1.1 | Confirm project team members | 23 June 2023 –  30 June 2023 |  |
| 2 | 1.2 | Decide project idea and fundamentals | 30 June 2023 – 14 July 2023 |  |
| 2 | 1.3 | Attain approval for project idea by supervisor | 14 July 2023 – 14 July 2023 |  |
| 1 | 2 | **POC Development** |  |  |
| 2 | 2.1 | Determine Problem Statement and business value | 17 July 2023 – 21 July 2023 |  |
| 2 | 2.2 | Work out scope and features | 21 July 2023 – 4 August 2023 |  |
| 2 | 2.3 | confirm all hardware and software tools | 24 July 2023 – 28 July 2023 |  |
| 2 | 2.4 | Assign roles and responsibilities | 4 August 2023 – 8 August 2023 |  |
| 2 | 2.5 | Create business model map and canvas | 9 August 2023 – 23 August 2023 |  |
| 2 | 2.6 | Create WBS | 24 August 2023 – 31 August 2023 |  |
| 1 | 3 | **Smart Contract Design** |  |  |
| 2 | 3.1 | UML Construction | 1 September 2023 – 11 September 2023 |  |
| 2 | 3.2 | Use Case Diagram | 1 September 2023 – 11 September 2023 |  |
| 2 | 3.3 | Supervisor Proof reading and Change implementation | 12 September 2023 – 15 September 2023 |  |
| 1 | 4 | **GUI and Architecture** |  |  |
| 2 | 4.1 | Landing Page | 18 September 2023 – 21 September 2023 |  |
| 2 | 4.2 | Home page | 18 September 2023 – 21 September 2023 |  |
| 2 | 4.3 | User Collection page with all associated forms | 22 September 2023 – 3 October 2023 |  |
| 2 | 4.4 | NFT Creation page | 3 October 2023 – 6 October 2023 |  |
| 2 | 4.5 | Available NFTs page | 9 October 2023 – 11 October 2023 |  |
| 2 | 4.6 | Profile page | 12 October 2023 – 16 October 2023 |  |
| 2 | 4.7 | Rented NFTs page | 12 October 2023 – 16 October 2023 |  |
| 2 | 4.8 | Web functionality and flow diagram | 17 October 2023 – 19 October 2023 |  |
| 2 | 4.9 | Full System Architecture including frontend, backend and database | 20 October 2023 – 26 October 2023 |  |

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| **Level** | **WBS** | **Task Description** | **Timeline** | **Notes** |
| 1 | 1 | **Integrations and Installations** |  |  |
| 2 | 1.1 | Install, configure and setup embark IDE | 27 October 2023 – 31 October 2023 |  |
| 2 | 1.2 | Web3 JS installation, setup and connection | 1 November 2023 – 2 November 2023 |  |
| 2 | 1.3 | MUI installation and setup | 3 November 2023 – 6 November 2023 |  |
| 2 | 1.4 | Meta mask wallet integration | 7 November 2023 – 9 November 2023 |  |
| 1 | 2 | **Develop Smart Contract** |  |  |
| 2 | 2.1 | Create function for Minting and adding of NFTs | 10 November 2023 – 17 November 2023 |  |
| 2 | 2.2 | Create function for fixed price sale of NFTs | 10 November 2023 – 17 November 2023 |  |
| 2 | 2.3 | Create function for pay-per-use setting of NFTs | 20 November 2023 – 1 December 2023 |  |
| 2 | 2.4 | Create function for pay-per-use purchase | 20 November 2023 – 1 December 2023 |  |
| 2 | 2.5 | Create function for NFTs Auction | 4 December 2023 – 11 December 2023 |  |
| 2 | 2.6 | Create function for NFT auction bidding | 4 December 2023 – 11 December 2023 |  |
| 2 | 2.7 | Create function for open offer sale of NFT | 12 December 2013 – 26 December 2023 |  |
| 1 | 3 | **Website Creation** |  |  |
| 2 | 3.1 | Create landing page | 27 December 2023 – 2 January 2024 |  |
| 2 | 3.2 | Create home page | 27 December 2023 – 2 January 2024 |  |
| 2 | 3.3 | Create user collection page | 3 January 2024 – 17 January 2024 |  |
| 2 | 3.4 | Create past user transactions page | 18 January 2024 – 24 January 2024 |  |
| 2 | 3.5 | Create NFT creations page | 18 January 2024 – 23 January 2024 |  |
| 2 | 3.6 | Create available NFTs page | 24 January 2024 – 29 January 2024 |  |
| 2 | 3.7 | Create profile page | 30 January 2024 – 6 February 2024 |  |
| 2 | 3.8 | Create rented NFTs page | 30 January 2024 – 6 February 2024 |  |
| 1 | 4 | **Testing** |  |  |
| 2 | 4.1 | **Front-end** |  |  |
| 3 | 4.1.1 | Test case development | 8 February 2024 – 7 March 2024 |  |
| 3 | 4.1.2 | Test script development | 8 February 2024 – 7 March 2024 |  |
| 3 | 4.1.3 | Supervisor black box testing | 8 March 2024 - 8 March 2024 |  |
| 2 | 4.2 | **Back-end** |  |  |
| 3 | 4.2.1 | Ganache setup | 11 March 2024 – 13 March 2024 |  |
| 3 | 4.2.2 | Smart contract deployment to ganache environment | 14 March 2024 – 15 March 2024 |  |
| 3 | 4.2.3 | Test run transactions pertaining to all types of NFT purchase and sale | 18 March 2024 – 25 March 2024 |  |
| 1 | 5 | **White Paper Documentation** |  |  |
| 2 | 5.1 | write down introduction and purpose | 27 March 2024 – 2 April 2024 |  |
| 2 | 5.2 | Expatiate problem statement and proposed solution | 3 April 2024 – 9 April 2024 |  |
| 2 | 5.3 | Explain in detail the working of dApp | 10 April 2024 – 25 April 2024 |  |
| 2 | 5.4 | Describe tokenomics associated with dApp | 22 April 2024 – 29 April 2024 |  |
| 2 | 5.5 | Provide citations and references | 30 April 2024 – 2 May 2024 |  |