Case Study



NFT Functional Testing for a leading gaming ecosystem platform



Client Overview

- Client is a gaming, entertainment ecosystem platform built on blockchain, designed for decentralized economies. With a focus on UX, usability and quality, their aim is to create infrastructure that will empower users, developers and stakeholders to play, earn and share experiences in an incentivized way.
- **Key requirement:** End to End functionality validation for their mobile based games
- Testing Types: Functional Testing, Compatibility testing Integration testing, Compliance testing, Network testing



Business Requirements

- To perform functional testing of the player card mints, rover, and city building features of the game
- To create functional test cases based on the design requirements
- To conduct Stand-up meetings on daily basis, bug triage and release retrospective meetings
- To perform compliance checks (up to date requirements) and provide flawless user experience
- To perform compatibility checks on cross browsers on Windows, Mac and Mobile platforms
- To perform stability checks on various Internet bandwidth



Key Challenges

- Gathering in-game resources on the map since it is a location-based game
- Limitations in creating a city in the game with maximum limit of only 5 buildings
- Necessity for a user to have a Meta mask wallet connected for gameplay
- No alteration and deletion of NFTs once created
- Maintaining the NFTs
- Ensuring flawless user interaction with the application



Deliverables

Daily Status reports, Release retrospective report, Defect reporting



- Performed functional testing to make sure that the NFTs and city features of the game are working as expected requirements
- Authored and executed more than 3000+ test cases per release which included edge case scenarios and negative test case scenarios related to integration points and functionalities
- Performed compatibility test on a wide range of devices and then ensured game consistency with the supported devices
- Performed compliance testing of the game with the latest marketplace guidelines
- Performed integration testing that helped detect errors arising from interactions between different components of the game
- Performed network stability testing by throttling the network bandwidth to ensure the game stability
- Covered release cycle testing and feature testing along with sanity tickets and bug regressions
- Maintained proactive communication throughout the engagement to attain highest customer satisfaction



Engagement

Project duration - March 2021 - April 2022 Team Size - 5 per project



Business Impact/Benefits delivered

- Achieved 100% requirements coverage for all feature updates
- Provided cost-effective solution and improved quality of the application
- 30% faster time to market leveraging iXie's proven test methodology
- Performed compatibility testing on a wide range of devices which led to significant device cost savings and helped maintain rich user experience
- · Provided feedback after end-to-end testing which improved game quality, user experience and this in turn increased market value
- Delivered promised performance with excellent additional requirements for quality and user experience.
- · Compliance testing from vendor helped in releasing the game faster without any submission delays



Tools/Technologv

• Jira, Test Rail, Test Flight, Figma, Meta mask wallet

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