MMORPG Game Testing on Windows, Mac & Linux

Quality Assurance Testing in Game Testing Domain– A Case Study

Executive Summary

With its teams already spread across United States, United Kingdom, Asia and China, working with a remote team wasn't new for our client. But for obvious reasons there's always inertia that 'first' time. Here too, there were apprehensions initially about outsourcing their testing work to India, concerns about the quality of work, the lack of 'complete' control, data privacy and integrity, concerns and questions about the team that would be working on the application. To add to it, Mindfire was a green horn to the MMORPG (Massively Multiple Online Role Playing Games) genre. Nevertheless, with our certified and experienced team of members and proven results in the past, it wasn't long before we had established an association with the client. What started as a pilot project with 3 team members for regression tests, to be reconsidered later, went to become a full fledged project with 9 members on board within a year's time. In addition to the testing services, the team is now also involved in every QA decision made for the application. With its feet strong in the ground and several successful releases and accomplishments, Mindfire continues to adhere to the client needs, with all gusto and consistency.

About our Client

Client *A leading developer of PC web-based games* | **Location** *Europe* | **Industry** *Online / Video games*

Business Situation

Outsourcing the testing services, gave the client all the time to concentrate on their core designing and development activities while the Mindfire team would help handle the validation work. With the client's openness and Mindfire's rich experience with the remote work protocol, Mindfire soon earned the client's confidence.

- Initial discussions included interview and access proposed resources: A software test lead and 2 software testers.

- Co-ordinate with the clients QA point of contact and thoroughly study the test requirements (releases, builds, defect tracker, product knowledge, workflow).

- Test planning, testing schedule, chalk down risks involved with contingency plans.

Solution Details

The Mindfire Solution

- Increased confidence & trust: Our confidence building in the application seemed to be directly proportional to the client's confidence building in us. The team continued to add value to the current client resources, testing on multi platforms, getting familiar with new features as they were implemented and testing them, updating test cases simultaneously, validating fixes and regression tests.

- More involvement: Initially, the new features were tested by the client's internal team. But gradually, all modules, new or old, were looked into by the Mindfire team for feedbacks, defects.
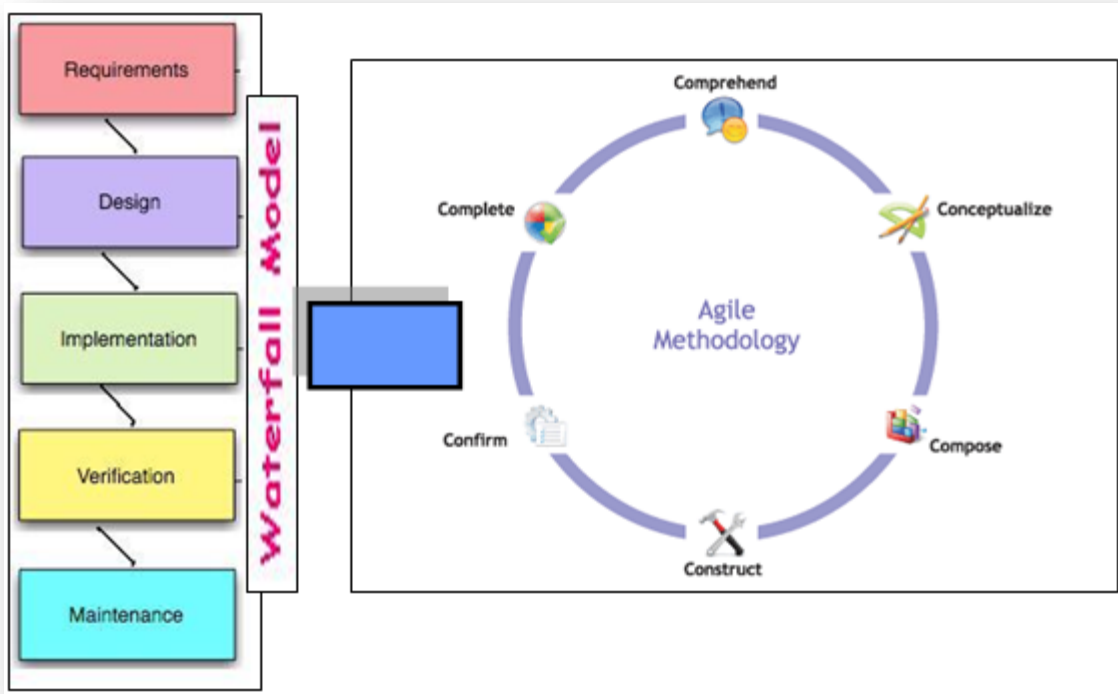
- Raised platforms to test: From testing on one platform, Windows, the requirements soon rose to Linux and Macintosh too. It was ensured that every member in the team is equally well versed with all the platforms, but the tasks were divided for faster execution.

- From Waterfall to Agile: In due course of time, the client switched from the conventional waterfall model to the latest Agile methodology, the releases became more frequent with the requirements changing frequently. It wasn't all that easy initially for either of the teams (onsite development and offshore testing) to get accustomed to the new system, switching from the conventional waterfall model to the agile methodology. Frequent scrums, updates, regression cycle and releases. But with proper co-ordination between the teams, it was eventually smooth sailing. In addition to the regression tests after the sprints, updating the test cases with the latest features, validating the fixed defects, were a part of the MIndfire testing workflow.

- Back-up resources: With trust displayed in our team and work, the client also approved to have back-up resources in case of project risks. We pool them as and when required with information to the client. Resources are completely utilized.

- Building the repository/Project management: The teams faced problems owing to the absence of a common repository that both the team could share for the existing data. A long term outsource wasn't planned by the client, therefore probably this took a back seat for quite some time. Mindfire suggested we have a common repository for our data so that the changes made are acknowledged by both the team. The client has finally considered a solution and has shortlisted a few project management tools. Mindfire is equally involved in the tool evaluation to ensure it meets our requirements.

Achievements

Mindfire proved its mettle, though being a green horn with the fairly new industry and soon the team grew from 3 to a whooping 9 within a span of a year. Mindfire continues to provide its services to the client and is in its 6th year of relationship.

Technologies

The architecture mostly deployed for MMORPG's is the client server architecture. The software that generates and persists the virtual "world" runs continuously on a server, and players connect to it via client software.
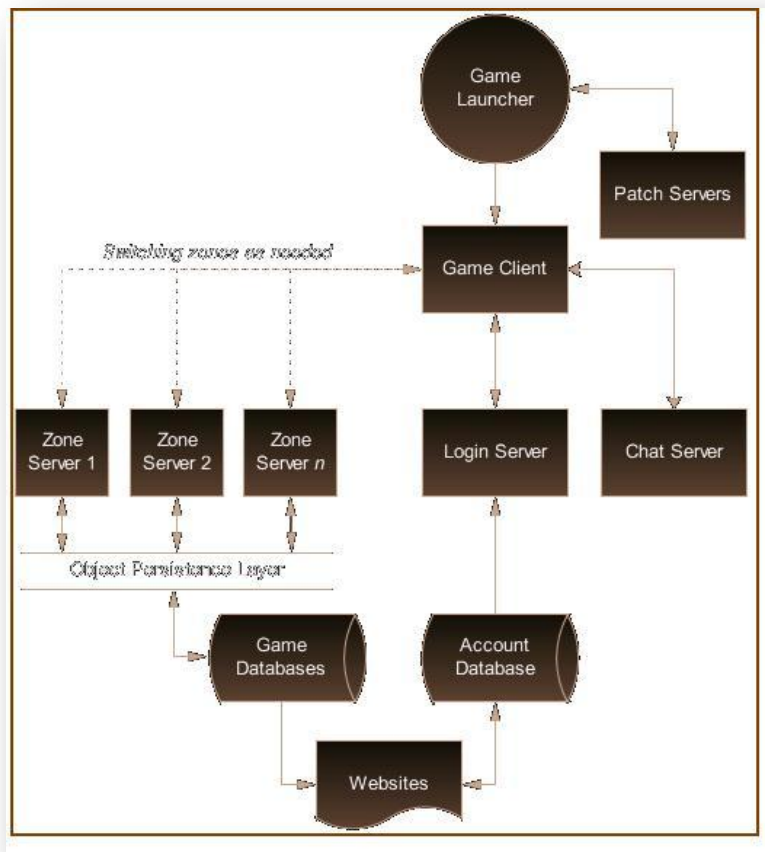
After having viewed a trailer, you can go for the limited period trial account, which although gives limited access to the game features but will definitely leave you asking for more! You can then upgrade to a full subscription for the desired period.   In spite of the enormous player count, the MMORPG runs on a single shard giving the players the advantage to interact with each other, no matter their location in the virtual world, once they are inside the game.

The technology is built on a stackless version of Python. This gives it an added advantage compared to the technologies used to create game logic in the past. The engine is built on DirectX9 and all the latest hardware and graphics technologies that you can possibly think of. The control structures provided by the Stackless save it from being a 'thread pooling'. This also makes it easier to make changes to the game. Utilizing their years of rich experience allows them to operate the server clusters at much lower costs.

Final Results

Customer Benefits

The client continues to benefit from the services provided by the virtual team with its available as and when needed considering the new methodology adapted. Its already rich data repository has grown richer with the virtual teams' interference!

Future Relationship

We hope to continue growing our testing team for the client and move in the automation track for better regression.