FIT5057 Project Management Assignment Three

Project Tempest

OCTOBER 2024

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Applied class: Saturday 11 am

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Deliverable 1. Agile Project Foundations

1.1: Project Vision and Initial Requirements

Problem Statement:

NexaForge currently has only a Day 1/7/Three-Month retention of 30/12/8% respectively. As Hamari (2015) notes, players who are invested in the game are more likely to spend, and in the case of social games, conveniently encourages players to advertise it to their friends (ARMS project Final Report, 2012 as cited in Härmä & LeGrand, 2013, p21). In short, player retention, and necessarily player engagement, is crucial to address for long-term business success.

Project Vision:

While both PvP FPS and non-FPS action games are popular, there's a gap in the market for PvP non-FPS action games. By pioneering this, we can capitalise on a first-mover's advantage, boosting player engagement and retention through cooperative-competitive gameplay and social interactions (Härmä & LeGrand, 2013, p21).

Enter project Tempest - A 3rd person fantasy action-arena where players team up to battle against another team of players in quick rounds. Be it a warrior, a sorcerer, a cleric, an assassin, players can be the vanguard, control the battlefield, support their allies or disrupt the enemy backlines.

Project Tempest aims to provide engaging experiences to a broad audience, ranging from casual to competitive players, with a focus on the hobbyist gamer who likes to explore many new strategies as the "median" player. Upon succeeding, it will improve player engagement, and thus, player-base size, player retention rates, play frequency and advertise NexaForge to others.

High-level Requirements:

Character customization both visually and in combat capabilities.

Dynamic and fluid combat system allowing players to execute complicated combos and masterfully dodge opponents.

Variety of classes to choose from, which complement each other while countering others.

Diverse map terrain that offers multiple opportunities for tactical advantages.

Guilds, friends and similar systems, with in-game gameplay features

Satisfying and intuitive graphics and audio

Minimal delay/lag in the game for smooth gameplay

Low performance requirements for lower barriers to entry.

Intuitive user interface to minimise player navigation headaches.

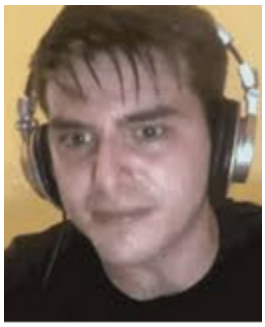
Balanced matchmaking for players of all skill levels.

Anti-cheat for fair play for all players

Data privacy and security for player data

1.2: Scrum Persona Development

Persona 1



James Smith is a competitive and skilled gamer who only wants to be better than everyone else. He lives and breathes gaming and rarely sees the sun.

Background	24 years old, male, streamer. Highly skilled gamer and very competitive.
Goals	Become the best player and reach the top of the leaderboard/rankings. Show off to his audience his skill at the game.
Pain Points & Frustrations	Lack of game depth makes it harder for him to distinguish his high player skill. Poor game balance makes for less variety in gameplay, making his stream less entertaining for his audience. Despises “pay-to-win” as it undermines the competitiveness of the game (Lebres et al., 2018).
Motivations	Takes pride in being the best player. Wants to earn a living via streaming his skillful gameplay.
Feature Opportunities	With our game keeping a close eye on both game depth and balance, James can have a myriad of ways to showcase his high player skill while creating entertaining content for his audience to watch.

Persona 2

Evan Ballnik is a hobbyist gamer who wants to enjoy the game, but does still care about getting to win. He plays about an hour every day after work.

Background	30 years old, male, project manager. Solid average skill level at gaming as a whole, likes trying many new ways of playing games across many games.
Goals	Experiment with many different things in the game. Socialise with friends. Have fair and balanced matches so he doesn't lose every game.
Pain Points & Frustrations	Despises games being optimised by the player-base into a rigid meta-game. Despises long loss streaks to opponents who are too good.
Motivations	Wants to have fun Wants to explore new strategies in games Wants to socialise with friends
Feature Opportunities	With a myriad of strategies to try among a diverse roster of characters and well balanced matchmaking, we can appease Evan's desire to try more playstyles.

Persona 3

Silver Tay is a very casual gamer who really only started playing the game because her friends wanted her to join them. She has barely played games before, and only just recently started playing frequently.

Background	27 years old, female, marketing analyst. Subpar gaming skills, rarely plays and only when invited by friends, doesn't play for more than an hour at once.
Goals	Socialise with friends Learning to appreciate a new hobby
Pain Points & Frustrations	Struggles to identify what all the characters do and what is going on in the game in general
Motivations	Wants to share a hobby with her friends Wants to have fun
Feature Opportunities	Being a newcomer to gaming, intuitive gameplay that emphasises teamwork is vital to keeping her engaged. Not to be understated, breathtaking aesthetics and immersive audio, as well as the visual, audio and UI design being intuitive and obvious is key to keeping her away from her struggles of learning a video game and facilitating her enjoyment of the game for what it is.

1.3 Journey Mapping

Persona - Evan Ballnik

Scenario - Evan is always on the lookout for new games, and hears about Tempest through word-of-mouth. He represents our median player.

Stages	Steps	Touchpoints	Pain Points	Ideal Journey Improvements
Stage 1: Awareness & Consideration	*Evan, the hobbyist gamer, realises he has never heard of any other game like Tempest before.* *Evan is curious about the game and searches it up.*	*Hears of Tempest from a streamer (Johnson & Woodcock, 2018)*	*Evan isn't entirely sure what Tempest is and what makes it different from any other game*	*Find a more concise and descriptive way to market Tempest than "non-FPS action PvP"*
Stage 2: First Interaction	*Evan looks through videos of the gameplay* *Evan looks through the class overviews* *Evan looks through reviews of the game*	*Navigates through the website of Tempest* *Views the trailer and class overviews of Tempest on the website*	*Trailer might not depict gameplay accurately*	*Trailer should include gameplay snippets.* *Trailer could include commentaries from both developers and either game reviewers or streamers.*
Stage 3. Engagement & Problem Solving	*Evan runs through the tutorial* *Evan starts his first match* *Evan loses his first match, because the game is hard* *Evan gets insulted by his teammates in his first match, because players in any multiplayer competitive game are often toxic*	*In-game tutorial* *Game guides on how to play the game* *Class guides*	*The game is hard.* *His opponents are too good and experienced at the game for him as a new player.* *The toxicity of his teammates is demeaning.*	*The tutorial system can be improved.* *AI players can be implemented for him to first play against AI opponents, letting him experience the game first.* *A behaviour score system can be utilised to keep toxic players away from the rest of the playerbase.* *Matchmaking can put him against easier opponents at the start, based on his performance against the*

	Evan struggles to identify what every character can do yet, because he isn't familiar with everything yet.			*AI opponents mentioned above.* *An AI assistant can be enabled to give gameplay tips and suggestions, for example to alert him where his allies and opponents are.*
Stage 4. Decision Point	*Evan looks up an online guide (Parker & Perks, 2021)* *Evan finds his second match much easier than the first, and with easier opponents, but still loses anyway.* *Evan likes a challenge, so he continues playing to improve.*	*Matchmaking system* *Behaviour score system*	*The learning curve is steep* *There are many niche tricks that are daunting to remember all of them.* *Class synergies and counters matter, but he doesn't know them yet.*	*In-game guides can be created to help lessen the learning curve.* *Co-op vs AI game modes can be expanded to lessen the impact of toxicity.*

Deliverable 2. Agile Planning and Sprint Allocation

2.1: Develop a Comprehensive Product Backlog

Epic	Feature	User Story	Priority (MoSCoW)	Estimated effort (Story Points)
Combat systems	Combo/stagger system	As a hobbyist player, I want dynamic combat that allows me to execute over-complicated combos, so that I can be immersed in engaging combat.	Must have	16
Combat systems	Defensive system	As a competitive player, I want to have fluid movements that allow me to stylishly dodge, block or counter enemy attacks with the appropriate skills and timing, so that I can display my skills in outmanoeuvring my opponents.	Must have	16
Combat systems	Terrain interaction	As a hobbyist player, I want to be able to interact with the terrain so I can utilise it to my advantage.	Should have	16
Combat systems	Map design	As a hobbyist player, I want a map with diverse terrain so I have multiple opportunities for tactical advantages.	Must have	32
Character design	Character variety	As a hobbyist player, I want to have at least 16 different classes to choose from to explore a variety of playstyles.	Must have	16
Character design	Gameplay customisation	As a hobbyist player, I want to have a variety of ways to meaningfully customise my character's gameplay to express my individuality in gameplay style.	Should have	8
Character design	Synergy/Counter design	As a competitive player, I want to create team compositions that complement each other well and counter enemy strategies to show off my drafting skills.	Should have	16
Intuitive and Satisfying User Experience	Beautiful and satisfying visual/audio	As a hobbyist player, I want beautiful and satisfying aesthetics and audio to best experience many worlds.	Should have	16
Intuitive and Satisfying User Experience	Clear and concise cues	As a casual player, I want the visual and audio cues to clearly and intuitively convey what is happening so I can understand what is happening more obviously.	Must have	8

Intuitive and Satisfying User Experience	Intuitive user interface	As a casual player, I want the user interface to be easy and intuitive to use so that I can waste less time fumbling with the menu and user interface.	Must have	8
Technical Infrastructure	Seamless performance	As a competitive player, I want the game to be responsive and crisp in performance, so that I can react with minimal delay.	Must have	32
Technical Infrastructure	Anti-cheat	As a competitive player, I want cheats, exploits and other unfair advantages out of my game for a fair playing field.	Must have	16
Technical Infrastructure	Data privacy	As a hobbyist player, I want my data to remain private to maintain some of my privacy.	Must have	4
Social and Competitive Systems	Balanced matches	As a hobbyist player, I want well balanced matches so I don't get too long a loss streak (Kang et al., 2024).	Must have	16
Social and Competitive Systems	Dynamic ranking	As a hobbyist player, I want to be able to experiment with new characters without being punished with too difficult matches so I can try new playstyles without losing every game (Sarkar et al., 2017).	Could have	4
Social and Competitive Systems	Social features	As a casual player, I want to be able to connect with my friends and watch their matches so I can bond with my friends better.	Must have	4
Social and Competitive Systems	Guild system	As a competitive player, I want to be able to team up with other like-minded players so I can find the best teams.	Could have	4
Social and Competitive Systems	Cooperative gameplay	As a casual player, I want cooperative gameplay so that I can experience working together with others for a common goal.	Could have	8

2.2: Strategic Sprint Allocation

Total story points = 240 (48 per sprint)

Sprint 1 - Combat groundwork
This is the most important foundation of the game. Trade-off: Terrain interaction is less crucial, but is a prerequisite for character design.

Epic 1
- Combo system (16 story points)
- Defensive system (16 story points)
- Terrain interaction (16 story points)

Sprint 2 - Character design
The main content of the game. Trade-off: Gameplay customization and synergy/counter design are not critical, but are corequisites for character design.

Epic 2
- Character variety (16 story points)
- Gameplay customization (8 story points)
- Synergy/counter design (16 story points)

Epic 3
- Clear and concise cues (8 story points)

Sprint 3 - Environment design
Completing the environment for the game, it supplements the above and so is done later.

Epic 1
- Map design (32 story points)

Epic 3
- Beautiful and satisfying visual/audio (16 story points)

Sprint 4 - Core technical infrastructure

Makes the game playable outside a developer build. As it is useless before a full release, it is done after the base game is ready first.

Epic 4

- Seamless performance (32 story points)

Epic 5

- Balanced matches (16 story points)

Sprint 5 - Finishing touches

Enhances the user experience to be marketable.

Epic 3

- Intuitive user interface (8 story points)

Epic 4

- Anti-cheat (16 story points)
- Data privacy (4 story points)

Epic 5

- Dynamic ranking (4 story points)
- Social features (4 story points)
- Guild system (4 story points)
- Cooperative gameplay (8 story points)

2.3: Sprint 1 Execution Plan

Sprint 1: Combat groundwork
Objective:
To establish the core combat mechanics and ensure a solid foundation for future gameplay development.

Scope:
Combo system
Defensive system
Terrain interaction

User stories:

1. As a hobbyist player, I want dynamic combat that allows me to execute over-complicated combos, so that I can be immersed in engaging combat. Priority - Must have
2. As a competitive player, I want to have fluid movements that allow me to stylishly dodge, block or counter enemy attacks with the appropriate skills and timing, so that I can display my skills in outmanoeuvring my opponents. Priority - Must have
3. As a hobbyist player, I want to be able to interact with the terrain so I can utilise it to my advantage. Priority - Should have

Acceptance Criteria:

1. A character can chain their skills together to consecutively stagger their opponent.
2. A character can successfully dodge, block, and counter moves, each with its own specific timing.
3. Obstacles, such as walls and trees, can block line of sight and projectiles. Difficult terrain slows down player movement speed. Knocking back enemies into obstacles deals extra damage, and falling from height forces players into a roll. Players can climb and swim.

In addition, test that the criteria above work as expected, and review the code quality.

Sprint Review:

Demonstrate a recording of each core component - a basic combo, then a dodge, block and counter, then terrain interaction. Gather feedback on the responsiveness, feel, animations and timing strictness of these systems.

Retrospective:

Reflect on how the core components could be refined for subsequent usage, and which components were more or less difficult than anticipated. Discuss any potential resource reallocation.

Deliverable 3: Agile Reflection and Professional Development

3.1: Reflection on Agile Game (LEGO/Agile Activity Experience)

The Agile LEGO game was a brief activity to simulate a short and small real-time project. A small group of participants (students) were tasked with assembling a LEGO city as part of an in-class assessment. Having had limited practical experience in project management, I was eager to see it in practice, and to learn what project management really meant in a project.

When I finished my task early, I noted how I could immediately be reassigned to help another team (task group) with their task, making for an efficient flexible use of resources. At the next stand-up meeting, I noted that we discussed our progress on each feature, and cross-checked our progress to reallocate manpower to accommodate the updated situation. We could also add in features that we realise we forgot to add in, and take a look at each other's work to see what each team did well that could be reused elsewhere.

In the midst of the flexible planning, I noticed that despite the freedom of allocation, it was very necessary to get some people locked in to some features first, simply to take initiative and get the ball rolling. This is where I noted the importance of the Scrum Master - someone has to take initiative, create a direction and resolve any clashes. When I was being reallocated for my next task having finished mine early, there was conveniently only one other team who needed help, but I could foresee it easily becoming a clash if multiple teams needed help with limited resources, and that would be when the Scrum Master steps in to resolve it and move the project on quickly.

Despite the simplicity of the small project simulation, we still ran into the most common constraint of all - limited resources, in this case physical resources. We resolved it by reorganising our usage to accommodate what we had, which is reminiscent of what would inevitably happen in more practical projects as well. It was also clear that the flexibility to reallocate resources, and freely collaborate played a key role in completing the project ahead of schedule.

To conclude, while the project simulation was small and simple, it showcased the impact of Agile principles - flexibility and collaboration - to lessen bureaucracy and smoothen workflows.

3.2: Personal Reflection and Career Development in Agile Roles

After this activity, I noted the importance of quickly mobilising people to their tasks over debating who goes where, and the importance of collaboration. The simplest yet most understated impact of all, was the collaboration of simply looking at what your team was doing and/or discussing with them about any problem that arose. As straightforward as it was, simply talking rather than keeping silent is the takeaway to remember in future Agile roles.

While I would still eventually aim to be a Project Manager for the remuneration package, this highlights to me that I should first aim to be a Scrum Master to get the “closer to the ground” experience to understand what I’m going to be managing before I become the manager. And following that, to be a better Scrum Master the most important skill I need to first develop is to communicate and facilitate communication effectively.

Team Presentation and Agile Artefacts

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