PROJECT MANAGEMENT PLAN

Project Wide Vision Statement

Elevator Pitch

For puzzle enthusiasts and casual gamers

Who are tired of single-puzzle apps that offer little variation and engagement

Our product, Puzzle Bluster, is a user-friendly multi-category puzzle app

That offers a diverse range of puzzles including math and word puzzles

Unlike other puzzle apps that offer mainly one genre of puzzles, Puzzle Bluster offers a collection of various puzzle types of different difficulty levels to keep a wide range of users engaged

Vision

Puzzle Bluster is a user-friendly, web-based multi-category puzzle app that aims to empower minds through a diverse range of engaging puzzles and attractive in-game achievements. Unlike single-genre puzzle apps, Puzzle Bluster offers a collection of word and math puzzles with customizable difficulty levels to cater to a wide range of users.

The key features of Puzzle Bluster include:
- Provides a diverse selection of puzzles across different categories and difficulty levels
- Enables users to save their progress and maintain a continuous streak through individual accounts
- Maximises user engagement through an achievement and leaderboard system
- Offers a completely ad-free experience
- Accessible from any device with a web browser, enhancing accessibility

Puzzle Bluster solves the problems of limited variety and engagement that are usually found in other puzzle apps. It caters to users of all ages and backgrounds, including puzzle enthusiasts, casual gamers, and educators looking to incorporate innovative teaching methods.

The system is designed to meet non-functional requirements such as performance efficiency, compatibility, security, and usability, ensuring a seamless and enjoyable user experience.

Stakeholders

- Client
    - The individual responsible for outlining the requirements of the project and whom the finished product is delivered to.
    - Interested in the success of the project and in obtaining a satisfactory end product
    - Decides on the direction that the project takes during development
- Player or users
    - Individuals interested in intellectual entertainment regardless of their age or background
    - They are interested in the educational and fun aspect of the puzzle game
    - Their engagement and feedback with the product affects the success and longevity of the final product
- Developers
    - The team responsible for designing, coding, testing and maintaining the end product of the project
    - The project helps with broadening their understanding of game development while expressing their creative ideas and developing useful skills for future projects
- Educators
    - Educators from various fields that are interested in the educational value of the project
    - The project may serve as a tool for developing innovative teaching methods or learning environments for promoting student learning and creativity
- Marketing team
    - The marketing team is responsible for promoting and advertising the project to a wider audience to attract customers and investors
    - Helps with promoting their career and enhancing their portfolio
- Investors
    - Investors are monetary backers and supporters of the project
    - They can enhance their reputation and credibility within the gaming and education market once the project succeeds

Team Management

Team	Name	Role	Email	Phone Number
1)	Wong Jia Xuan	Product Manager	jwon0164@student.monash.edu	+60177531317
	Chua Xian Loong	System Architect	xchu0015@student.monash.edu	+601156320025
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	Anas Tarek Qumhiyeh	System Architect	aqum0001@student.monash.edu	+601112983246
	Tan Jun Yu	RTE	jtan0245@student.monash.edu	+60162783792
3)	Muhammad Ibrahim bin Mohd Yusni	Product Manager	mmoh0156@student.monash.edu	+60196621128
	Aditti Gupta	System Architect	agup0031@student.monash.edu	+601124208835
	Parth Pandit	RTE	ppan0022@student.monash.edu	+60173748600

Description of Team roles and Responsibilities

- Product Managers
  - Attend meetings with key stakeholders of the project
  - Gather requirements from the client.This Involves understanding the needs, pain points, and desires of the target users or customers.
  - Ensure the client is always updated with the progress of the project by maintaining a continuous feedback loop
  - Ensure the product is always aligned with the requirements
  - Conduct market research regarding the latest trends, competitive landscape and growing demands in the industry.
  - Plan and create user stories along with their respective priorities in the product backlog

- System Architects
  - Evaluate the pros and cons of the tech stack options available and possibly find the most suitable ones to fit the system's architecture
  - Designing the overall system architecture including the software,database, API integrations rationally in order to create a scalable, reliable, and efficient system design.
  - Ensure the system architecture design is following industry best practices
  - Optimise the system performance to meet not only the functional requirements but also the non-functional requirements
  - Ensure seamless integration with third party libraries, frameworks and APIs

- Release Train Engineers (RTE)
  - Making sure that the Agile teams maintain excellent communication and are in line with the project's primary goals and priorities
  - Facilitate the Program Increment(PI) planning process
  - Monitoring and overseeing the execution and delivery of Program Increments within the Agile Release Train
  - Identify possible areas for improvement to improve the overall performance of the team
  - Keeping sure that the team has appropriately adopted the Agile principles that have been agreed upon

Process Framework

The process framework which will be employed in our team is largely based on SAFe but with slight differences to accommodate with the nature of the project. Similar to SAFe, the large project team is divided into multiple subteams which in our case is 3 subteams in total. Each of the subteam has 3 main roles which are System Architect, Product Manager and Release Train Engineer (RTE) that are responsible for the Agile Release Train. Scrum is adopted in each subteam for process management but also not followed entirely. For instance, the practice of daily standup meetings in Scrum is omitted and replaced with weekly standup meetings. This is due to the fact that the project members are not working full time on this project and will also need to undertake assignments from other units so there might be no daily progress updates from the team. Retrospective is kept in order to summarise team performance after every iteration and look for areas of improvement. Besides that, Program Increment Planning remains as the core of our development process. During the PI planning,team members hold discussions together to understand about the objectives and goals to be achieved for the upcoming iteration.

While adopting the agile principles for delivery and development,we decided to omit the lean portfolio management aspect of SAFe framework as it is found not as significant based on our project scope. As that being said, the roles associated with lean portfolio management such as Epic Owners and Enterprise Architects are not included in our team structure alongside their processes like strategic themes, portfolio vision, value stream management and many more.

Policies to keep everyone informed

Stakeholders	Interests	Influence
Client	Interested in the success of the project and whom the final product is presented to	Has major influence over the development direction of the project
Developers	Interested in designing, coding, testing and maintaining the product as well as the ethical responsibilities behind each decision.	Has minor influence over the project with the sole purpose of fulfilling the client's requirements
Product Manager	Interested in making sure that the requirements and deliverables meet the client's expectations	Has major influence as they are responsible for conveying the client's interest to the rest of the team
System architect	Interested in the quality of system design and integration of reliable software and hardware	Has major influence over the technical decisions of the project
Release Train Engineers	Interested in driving continuous improvements in the team and coordinating release of deliverables	Has major influence over the Agile development process of the team

PI Planning Session Methodology

Duration	Agenda item	Responsible Team/ cross-team	Description
15 mins	Business context	PM	- Discuss about vision statement that correctly aligns with the requirements of the project - Present the vision statement to the team and ensure everyone understands and agrees with it - Present how our solution is addressing customer needs
30 mins	Product/solution vision	PM	- Present product vision - A walkthrough of all the features in the program backlog - Discuss with client to clarify/understand requirements - Discuss with client to highlight the NFRs expected to be met in the product - Highlight project milestones
10 mins	Architecture vision & development practices	SA	- Present architecture vision - Present potential architecture solution - Pros and cons of the alternatives available - Propose available choices of development practices (eg. test automation, DevOps, CI/CD)
30 mins	Team breakouts	All teams	- Breakdown all the features from client into user stories or smaller tasks - Estimate effort needed for each task/user story - Establish a plan for upcoming iteration - Identify risks and dependencies - List down initial PI objectives - Identify features that are too complex requiring negotiation with client to reduce complexity or remove entirely - Identify and note down features that are of higher difficulty requiring additional focus during iteration

10 mins	Draft plan presentation	All teams	● Outline key planning outcomes from each breakout team
5-10 mins	Management review and problem-solving (planning adjustments included)	RTE to facilitate, all teams	● Gather the outputs from each breakout room, including identified features, user stories, dependencies, estimates, and objectives. ● Communicate the finalised decisions with the client to ensure agreement and a shared understanding
15 mins	Final plan review	All teams	● Gather feedback from client and finalise the plan ● Ensure RTEs are updated and certain with the objectives and overall plans so they can be documented
15 mins	Program risks	All teams, RTE to facilitate	● Identify risks that may impact the project ● Discuss about the likelihood and the severity of the identified risks
After	Final instruction -	RTE & PM	● Captures the team PI objectives and stories and update them accordingly in Trello ● Reviewing team and ART events ● Discuss about how SAFe framework will be employed in our team (things that are changed or kept) ● Discuss about communication tools and also meeting schedules ● PMP planning

After
- PM team updates program backlog with the finalised user stories
- PM team updates roadmap, which should include:
  - Delivery dates
  - Feature dependencies among teams
  - Relevant milestones
- SA team are responsible to do research on the potential technologies
- SA team also analyses the potential risks of the architectures identified
- SA team chooses the final technologies or tools that will be used for development based on the pros & cons found
- RTE team keep tracks of everyone's progress in the work breakdown structure
- RTE team documents all the relevant risks in the risk register document
- RTE team documents information like git usage, CI/CD tool, testing plans, NFRs into the Quality Assurance Plan
- RTE team drafts the PMP plan