Hypothesis

Prompt: Partnerships in Games

1.How do the choices implored by the player(s) with regards to making wise financial decisions aid them in generating the target profit margin and what does that mean for their collaboration if they don't reach the target profit margin ?

2.In what way did the business context of the game induce players to aid each other to complete the set task and how does that feed into the notion of two minds being better than one ?

Interrogation and Exploration

With this game, I am looking to find or investigate how the genre of puzzle games can be used to implore collaboration to ultimately solve a set task or objective.
With that said, I designed the game in a way that would it would not only induce strategic thinking around financial decisions in a business context but also in the way that it could compel one to seek aid / assistance from someone else, thereby enhancing the concept of how a partnership would work.(This is entirely fictional as one player can also play the game)

Process:

After thinking for some time about how i would go about incorporating the concept of a partnership, i eventually got to one idea that seemed promising to explore further:

This idea was; make a puzzle game with basic puzzle solving mechanics but within a business world context. That is; players act as business owners(2) who have been appointed by the Johannesburg Stock Exchange to facilitate the opening of a general goods and services store. Players have a set task to generate profit for economic growth for this business/store by making wise financial decisions when it comes to the act of buying the goods from a supplier and selling those at a price that will generate a profit margin for the business.

Game idea breakdown:

The first starting point was to understand how the concept of profit making links to

the idea of a partnership and how can that understanding be applied within a game world. Much of what came from this research entailed the ideas of trading as a central concept within the business world and how that in turn induced the involvement of two parties for an effective trading deal. This in turn became the mechanic that informed the game in that players will be supplied with a start up capital to use to purchase goods and services they would want to have in their store and how those purchased goods and services will help them generate profit for their business.

An interesting quote found reads: *"The objective of trading business has been to buy goods at the lowest possible cost price and sell them at the highest possible selling price that the market would allow to generate a profit margin"*(Marimba , 2021)

With that in mind, I started to think about what items players would be given to tune them into acting on the above statement to complete the overall set objective of generating a profit for the business by working together. I ended up using items that would be relevant to issues and concerns that people living in South Africa would also relate to. This included items such as generators, electricity, groceries etc.
P.s : the questions written in italics are questions i asked my self while going through the process of making this game:

How would players know how to rank items in terms of value and cost price when buying them to help them in selling them at prices that would yield a profit margin ?

I created a rule that served to guide player actions, agency and outcomes:

Lowest Cost price = Highest Value .
Highest Cost Price = Least/Low Value.

Highest Selling Price = Most Value.

Lowest Selling Price = Least Value.

Players would then use their own agency to sort and arrange the items based what item has the most value and that would have a lower cost price and vise versa. Players would then use the money in their account to trade it with the goods they've managed to sort out in an attempt to make profit from selling them.

How do players know if they are doing the right thing?

Items and prices to be used are generally on a slot holder that they would occupy. For players to know if they have correctly assigned the correct item to the correct price and slot , the item and target slot holder would have to be on the same layer.

Unity's Raycasting function played a huge role in the design of this prototype because it is through its usage that allowed for a well connected system between the items to be traded, the price involved and the slot holders that host the traded items.

For player feedback purposes, I had initially decided to use "cross" and "tick" images to let the players know whether the action they have done is in line with the correct solution. After playtesting this idea, i decided to change it or remove it from the game and i will delve into the reasoning in the reflection section.
Another feedback hack I used within this game was the use of a gradual buy or sell button interactivity and color indication the closer and closer the players got to the solution of the puzzle. This button would have an appearance speed value that regulates its visibility and interactivity the more the solution unraveled itself through player inputs and strategy.

How do you avoid one item that's on a specific layer to enable the button's interactivity because it is on a slot that has matching layer even though you're not done solving the whole puzzle challenge?

-I created an original layer for each slot and item(s) that are supposed to go in that slot.
- I also created an original script that handled the ray casting events for each item and price placement as opposed to having one universal script that deals with the ray casting. This helped make the logic of the game's code and system more organized and less confusing for the entire game. This way, not every item could occupy any slot just like that because each slot , item and price game objects followed the above logic.

Reflection

By placing players in a business context world and causing them to think like business owners, there's a lot to be said about how the overall approach of the game contributed to interesting partnership dynamic. As a designer, creating an experience that was both insightful and very close to practicality was really interesting especially in retrospect to how the gaming conditions and constraints could also be applied to real life business problems or objective. Building up good financial decision making skills is a difficult process that requires dedication and practice. By using the game as reference, the implication of its design in how it allowed replay ability was an insightful example of how related the concept of the game was to a real life practice.

Players had to rely on each other and use each others assistance to make decisions that would benefit the economic growth of their business. This required a lot of agreement and communication from both parties. This is one moment from the game that helped establish the full view of how a partnerships generally works. The result of the game (i.e. reaching the set profit margin or not) was a direct reflection of the players active agency and partnership abilities within a business contextualized world.

Looking deeper into the game, although i created a "back" button for players to be able to use the previous level as reference to aid them in solving the next level, creating a system that saved the players progress from the previous round or level was quite difficult. Upon playtesting, I realized how the completion and transition between scenes fully erases the existence of a previous play experience or progress, causing players to restart from scratch. This , to a certain extent was daunting for some players as they had to memorize some of their answers to figure out how to tackle the next challenge based on what they did previously.

Furthermore, upon completion of the game, I realized the game could have also been expanded a bit extensively to create more complexity. The way people attributed value to some items and in turn responded or took heed of the different market or global events changes that occurred within the game also meant that they had to relate the market change to how they would've reacted to it in real life or in areal life situation. One of the feedback for the play testers that was also a moment in the game to reflect on was knowing how strike a balance between a reliable hint or progress system that also does not take away from the players ability to exercise their own agency in the game. This was a sobering thought to ponder about because i did struggles with not knowing "how much is too much give away" to the player and

with that, can they then still have that element of co-operating with each other if the system of the game itself is built in such a way that tells the player more than a lot of info about whether they are solving the puzzle correctly.

Playtest Report/Feedback

As I have already alluded in my reflection section about the struggle in striking the balance between a reliable hint or progress system with not "giving away too much " to the player so they can also implore their own agency or strategy , much of the feedback i received from other people was with regards to the player feedback progress indicators I had initially set up. To explain a little bit in detail, I had initially set up player feedback images (namely the tick as well as an "x" or a red cross". Both of these player feedback images were for the purposes of facilitating the player progress with regards to whether what ever form of action they do is in line with what the solution of the puzzle was at that instance.

However after playtesting, a lot of valid points were made about its ineffectiveness in the game play experience it caused for the player(s) and for the game overall. Some of these points were centered around how the use of the feedback images took away from the collaboration that the design of the game was encouraging. Because the game already let the players know if their move or action was correct or not, there was less engagement between the two players on what to do to figure out the correct answer. This in turn , affected the dynamic of being incentivized to seek aid from your partner in the collaborative business world that you guys found yourselves in. If players did not know what was right or wrong from their actions, it would've opened up more room to seek assistance or for discussion, conversating with each other on what would be the best strategy to solve the challenge at hand.

Another form of feedback from the play testers was the introduction of stakes in the game. If players knew that there was a risk of making a loss for example, they could be more mindful of how they align or place their items relative their perceived value and seeing the outcomes of that. This helped in creating various scenarios that introduce risk in different ways to raise the stakes in the game, enhancing the importance of player agency relative to item and price placement with an effective strategy to generate the target profit margin.