CHAPTER IV DEVELOPMENT

To create a board game containing an in-game advertisement about information system major, the development process is being separated into several segments :

4.1. Deciding on Concept and Genre

In this phase of game designing. The first concern is to create a concept that's suitable to put In-Game Advertisement using a few pieces of information of Information System major in Unika Soegijapranata Computer Department, while being able to retain its replay value.

The second concern is to make the game simple and fast enough to setup and reduce the amount of game components as small as possible. This needs to be done because the game is aimed to be played by general public, not towards gamer or board game enthusiast. General public tend to use quantity over quality to measure how fun some games are played. For example, people who plays video game but is not an avid gamer, tend to play games like multiplayer online battle arena (MOBA) and sport games because they feel they played the game more than an avid Role-Playing Game gamer, who spent hundred of hours into the game just for a single playthrough.

The concept chosen must contain an element of university in it because this game will be a game that contains in-game advertisement of Unika Soegijapranata Information Systems Department. And it's decided that a way to describe the activities and classes in the game is to make the players to be a freshman student enrolling in Information Systems Department that must do their best to graduate from university by taking classes and attending student activities related to Information Systems Department.

This "Activities" will be the main medium of the In-Game Advertisement, where most of the flavor text will contain one or two keywords, sometimes a blatant name of a subject can be mentioned so people would know what is being done while they are studying in Information Systems Department

Another message that should be conveyed as a part of In-Game Advertisement aspect is the future prospect after graduating. There should be some job opportunities

that must be present in the game that shows what the students can be in an ideal situation when they graduates from Information Systems department. Ideally, this should line up with the pamphlets of Information Systems Department, but for this prototype, the general proficiency and opportunity is used.

Eventually, it was decided that the name of the game is "Flow Into The System" or FITS for short. As for the reason to use that particular name as the board game title, the name was chosen because the goal here is to graduate, the players, who in-universe would be the students, should follow the events and activities while trying to learn to improve themselves. Thus, delving deeper into the subjects Information Systems Department has to offer and try to keep up and learning the flow of knowledge they got.

The genre picked for the following prototype is a party game. As why party game is being chosen for the genre, the reasons are:

- a. Party games relies on (and subsequently, heavily encourage) social interaction between its players, which is suitable for public to get into when they just want to have fun with their peers.
- b. Party games have a simple setup and a rather simple gameplay. Making its preparation time short and the players can start playing in a short interval of before a break between each game.
- c. Party games also have a rather short play time (on an average of 20-45 minutes). This play time is put into consideration because most people only play tabletop games for fun and do not want to spend one to two hour for just one set of a game.

4.2. Prototyping Stages

4.5.1. Deciding on mechanics and components

After deciding the concept of the game, the second stage is to decide how the mechanic of the game and the components required to play the game. This needs to be done in order to make the game engaging and enabling the players to engage with one another.

a. Game Mechanics

The mechanics used in this prototype is bidding mechanic. Bidding mechanic is used to exchange player's resource and trade it for another resources that led to player's victory.

The other game mechanic chosen is push your luck. A mechanic that usually relies on dice to be used. But in this case, dice should not be used because a total RNG does not really make the players to be engaged in the game as its outcome cannot be controlled by the players. In order to giving the impression that the players have control to their options, a group of cards with options of failures and successes is chosen.

b. Components

The game components used in this prototype is cards and tokens. The cards is divided into several types, which are Action cards, Event cards, Effort cards, and Goal cards. All four types of cards will have different function. Action cards will be used to interact between players or the field. Event cards is the main component to implement In-Game Advertising and to depict what kind of activities people can participate. While Effort card is the element that provides a random element in the game, and Goal card is the card that will determine whether players win the game or not.

Tokens will be used to limit the resources available for players to get the aforementioned Event cards. The amount of tokens that players will get is four, but it will be determined after playtesting.

a) Paper prototype

The paper prototypes are made with uncoated HVS paper. In this current stage of prototyping, the components are not polished, printed with no original artworks but using random artwork that has elements of the card's names.



Figure 4.1. Prototypes of Goal Card (top left), Event Card (top right), Action Card (bottom left), and Effort Card (bottom right)

In Figure 4.1. It is shown that most of the card components don't have a proper positioning, typography, artwork, and flavor text.

Just the mechanically functional prototype is enough to test the mechanics of the game.

4.5.2. Playtesting

The playtesting of Flow Into The System Board game is conducted with selected friends in Komunitas Boardgame Semarang. After the playtesters got the explanation of what is Flow Into The System about and how the rules and mechanics goes. The playtesters, including the main developer himself plays the game. After each of one session, the players then reviews what can be fixed, what element of gameplay should be Improved or should stay as it is, and to discuss about the proper artwork that can be used as well as the placement of In-Game Advertising element in the game. In this case, the placement of the card's flavor text.

4.5.3. Balancing

After collecting the inputs, The playtesting of Flow Into The System Board game is conducted with selected individuals, the mechanics and flow of the game is being evaluated as whether it is balanced and fun enough to play and following is the list of notable changes throughout the balancing stage:

- a) The variation of activity cards are reduced from 17 to 10 in order to eliminate the unecessary activities that are not a core activities inInformation Systems department. The total amount of event card itself is being reduced
- b) The variation of action cards is reduced to 25 cards in total with (x) variation. This is done to limit the card effect that deemed to be unfun to players, like, to gather up all action cards in player's possession and then redistribute them randomly, as this, while can be used to refresh the action cards, deemed to not having fun factor and has potential to needlessly prolong the game.
- c) The action cards that player can keep in their hand is limited to 3 and needs to be restored every round, instead of habing no hand card limit. This is to prevent players from hoarding all the crucial cards in their hand using "Destiny Draw" action card
- d) The use of stamina token in the bidding phase. Players must spend at least one stamina point so the game will be more engaging. Since when there's no event that players needed, players can just bid no amount of stamina. In-universe, this kind of action also encourages skipping classes that players think does not needed.

4.3. Choosing Development Tools.

Other than concept and Developing a proper board game needs proper tools in order to increase developer's efficiency. During the development of *Flow Into The System* Board Game, the developer uses:

4.3.1. Clip Studio Paint

The following tool is used in order to make the game components, especially the game's cards. For it must be designed in a way that's simple yet represent the college life elements enough for the players to understand what's going on.

Clip studio paint is chosen over the other famous digital imaging software, Adobe Photoshop, because Adobe Photoshop is primarily an image editing program, which tools are optimized towards the manipulation and tweaking of already existing images. Whereas Clip Studio Paint, is geared towards illustration program, with its tool better suited for creating an artwork from scratch.

4.4. Prototype Development

4.5.1. Game Objective

The objective of this game is to achieve a total attribute point equal to the attribute requirements in that has been given in the goal cards. The game ends when all but one player successfully reaches the minimum point in their respective goal cards.

This is to illustrate that each player who "attends" the events has been qualified to "graduate" from university. And learned the proficiencies and qualifications for their next step of life post-graduation.

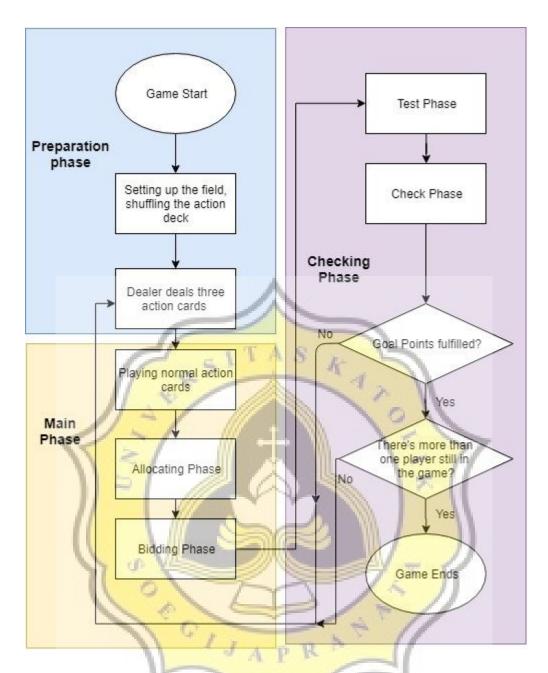


Figure 4.2 Flow into The System Gameplay Flowchart

4.5.2. Game Components

The game consists of cards that are divided into following decks:

1. **Goal Deck,** which comprises four "goal cards", containing the goal that each player must fulfill in order win or clear the game.

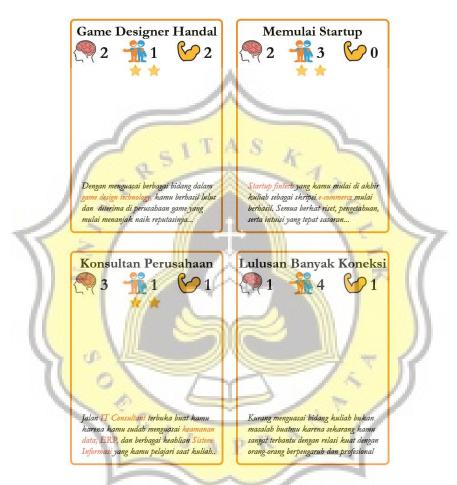


Figure 4.3 All four goal cards: Expert Game Designer (top left), Initiating a Start up (top right), Company Consultant (bottom left), and Graduate with great acquaintance network (bottom right)

2. **Chance Deck,** each comprises five "usaha berhasil" (successful effort) cards and "usaha gagal" (failed effort) cards. The cards' use is to determine whether the players can take possession of event card they chose or not.



Figure 4.4 Two kinds of effort cards. One shows failure (left) and the other shows success (right)

3. Action Deck, is composed of six kinds of action cards with different effect. Players use these cards to interact (mechanically) in the game. Furthermore, action cards is divided into two kinds: normal action cards and instant action cards. The difference being instant-use action card, which has a lightning symbol on its effect box, can be used outside the main phase, while the normal action card does not.



Figure 4.5 Two kind of action cards, normal action card "Melihat Jadwal" (left) and instant action card "Bangkit Kembali" (right), the only difference being a lightning symbol beside the stated effect.

4. **Event Deck,** made up of event cards depicting activities that can and will be done in the information system major.

5. Tokens

Each players will be given four tokens of different colors. This token will be used as energy tokens in order to obtain event cards duringt he bidding phase. The Players can substitute the tokens by any forms of small trinkets, as long as it is four in total and are in the same form or shape while being different from other player's tokens.

4.5.3. Gameplay:

The game has several a few phases, preparation phase, main phase, and checking phase. Explanation for each phase below:

1. Preparation Phase

This is a phase where the players get themselves ready to play the game. There are several things that players must do before they play the game:

- a) Shuffling the action cards, event cards, chance cards, and goal cards each into separate deck.
 - b) Setting up the field, placing the pile of cards just like Figure 4.6.

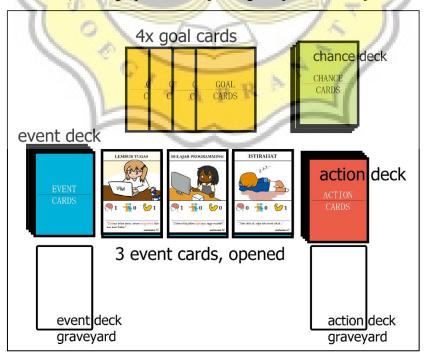


Figure 4.6. Field that must be arranged in order to play Flow into The System

- c) Distribute the goal cards to each player randomly, each player must not show their goal from other players.
- d) Distribute the cards in the action deck until each player have three cards in their possession.
- e) Flip the top three event cards in the event deck open; put the revealed event cards in the event zone.

2. Main Phase

Each player will be able to play their cards here. Using them to make an advantage. Such as changing three revealed event cards on the field, drawing new action cards, looking at the top three cards from the event deck.

The players then allocating their their energy token and after a count of three (or any signaling agreed beforehand) putting their energy token over energy cards of their choice. Players do this subphase at the same time.

If a player or more allocated their energy token to the same event, the player with more allocated energy got his/her priority.

3. Checking Phase

During this phase, the players are checking whether they are able to take their respective chosen event card, and to check whether they are successful in taking them. This phase is divided into several sub phases:

- A. **Test phase,** Players pulls three cards from effort deck one by one. If the player got at least two successes, the task is won by him / her. If not, let the second bidder do the 'test phase'. If there's no bidder, discard the task.
- B. Check Phase. Players check whether the points they collect is now enough for 'graduating' with his/her goal card in mind. If it is

enough, the player wins the game. If there's not enough points for anyone to win. Draw action cards until each player's hand card becomes three, then repeat the process from the main phase.

During the check phase, if at least one player still have their energy token in their possession. Players would not refresh their energy token. Players with all of his/her token spent cannot do the bidding process, but still be able to play action cards.

4. Game ends when:

all players, bare one, reaches their goal. If there's a special case where two last remaining players "graduates" at the same time, there would be no loser. Everyone's a winner.

4.5. Game Mechanic and Design Explanation

4.5.1. Event Card

Event cards, as the name says, are used to depict the life of university students.

The card is broken down into several section, as mentioned by the figure below:



Figure. 4.7. Event card breakdown

From the sections above, Card name, card artwork and flavor text is the main medium used to introduce the activities.

Card name, is the name of the activity that's being used. Using a general term such as *presentasi* (presentating study material towards other students) or *lembur tugas* (finishing assignment until late in the night) in order to make the players understand the general activities.

This general activities, then will be explained further using the card artwork, in which some more detailed information. With the figure above mentioning in-app purchase analysis as an example.

Furthermore, The event explanation will be elevated further using the flavor text on the bottom of the card. Even though this flavor text has no effect on gameplay, it served as a fluff / in-game lore, quoting real world sources, or in-game references.

Below are several event cards that is used to depict the study and organizational activities of Information Systems Department in Flow Into The System Board Game. The words with red color are activities the cards tried to introduce about Information Systems Department with the use of flavor text.



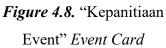




Figure 4.9. "Lembur Tugas" Event Card



Figure 4.10. "Belajar Programming" Event Card







Figure 4.11. "Kepanitiaan

Event" Event Card

Figure 4.11. "Aktif

Organisasi" Event Card

Figure 4.12. "Berlatih Game Making" Event Card



Figure 4.13. "Take a Project" Event Card



Figure 4.14."Market

Research" Event Card

While there's also event cards that do not have any advertisement aspect and is added in the game serving as balancing aspect.

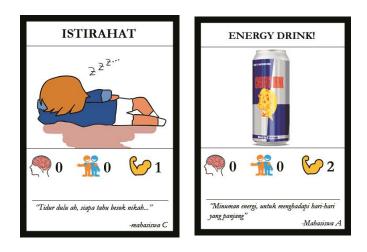


Figure 4.15. "Istirahat" Figure 4.16. "Energy

Event Card Drink" Action Card.

4.5.2. Action Cards

Action Cards is used to explain the possible actions players will do during the course of activities / university life. In spite of the numerous possibilities that players can take, the action cards that's being used are the actions that shows interaction, either player-player interactions, or player-event interactions.

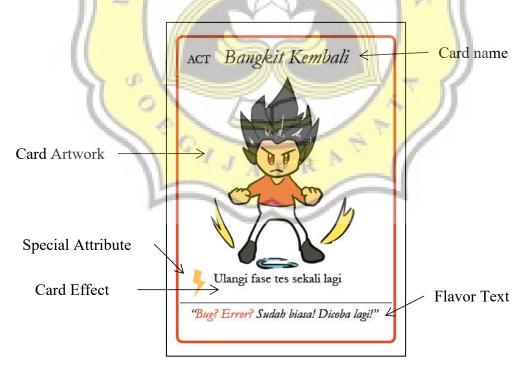


Figure 4.17. Action Card breakdown

Overall, the same design is applied to the action cards. It has card name, card artwork that depicts what kind of action players will make. And the flavor text, which will enhance the in-game advertising element of this game.

Special attribute is given the image of a lightning bolt, represent the card's nature which is able to be played during any phase instead of just in the main phase. This design is inspired by the idiom "As fast as lightning" which means to be able to do things quickly or speedily.

4.5.3. Effort Cards

Effort cards represents the chances of failure even you tried. During the checking phase, players need to pull the success card twice out of three pulls from the effort deck.

at least two success cards in order to gain proficiency of the chosen event, representing that if he tried enough, he will be able to successfully gain proficiency.



Figure 4.18. Effort Card types: Success (left) and failure (right)

The example here only contains two cards. With a picture of a happy expression for the success card, and dejected, slightly crying expression for the failure card. Representing player's emotion when they do task successfully, or resulting in failure.

These cards are used as components that generate a random element in the game. While there is only two variant of the cards (failure and success), it is not the same as using a coin toss to generate result. Letting the players to choose the

cards themselves will give them an illusion of choice, making them feel that they are in control of the game with their own decision making. In-game-universe, their ability to choose has the message that players must do their best on their own chosen decision.

The amount of effort cards consists of five success and five failure cards, making the initial chance of success 5:5. Once again, this is different than doing a coin toss because in this case, the mechanic of the game makes that when players fail the test phase, the cards drawn are not being returned to the effort deck until that particular player finishes the phase. Making their chance to pull failure card to decrease when they tried again using "Bangkit Kembali" action card and the test phase now turns into the player's favor. This should make players to be more confident in using "Bangkit Kembali" action card.

4.5.4. Tokens

During the game, each player is given four tokens. This tokens are colored differently for each player to represent player's stamina. In order to gain proficiency point in each categories, players needs to spend a minimum of one stamina point, representing the activity the do during classes or organizational activity.

In the bidding phase, each players would have to put at least one of their stamina tokens on the chosen event card, and when there is two or more players putting their stamina tokens on the same card, the player that bids higher amount of stamina token wins the chance to do test phase with the chosen card. This is a mechanic of resource management, whereas players should predict what kind of event available is most desirable or needed, which event card is less likely to be picked up by other players but still being needed by themselves at the same time so the allocated stamina token(s) would be effective in securing proficiency points.