Game Design Improvement



POSE HOPSCOTCH

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PART 1

1.a)Hopscotch - why a good game:

Hopscotch is a fun playground-game, very popular among kids, especially girls. In this game, players toss a small object into a pattern of square-spacesdrawn on the ground and then hop through the spaces to retrieve the object. Based on my analysis, some of the things that make the game fun are

- **I. Hopping -** is a really fun thing to do. It is an energetic and cheerful activity.
- II. The rules of the game are really simple and easy-to-understand.
- III. The game can be played anywhere, both outdoors and indoors.
- IV. The game setup is also easy and quick. It is easy to draw on the playground and easier to find a stone. Even indoors, the setup becomes easy with a chalk or a marker.
- V. The game is fun for kids to play as well as to watch as they wait for their turn.
- VI. Any number of players can play.

1.b) Problems of Hopscotch:

Kids indeed enjoy the game a lot. Though adults play the game, they do end up getting bored of the game pretty soon. Some of the problems that cause this are:

- I. There is no variation in the gameplay. Hopping is fun, but after a few rounds pass by, it gets too repetitive.
- II. There are as many rounds as the squares in the course. Hence it gets boring if the game takes too long to finish.
- III. Players play one after another. There is no way for the waiting player to engage himself in the game, till his turn.
- IV. As every round/turn is almost the same, the game does not get more challenging.
- V. The game doesn't provide players with much gameplay choice hence there is no agency for any strategy.

<u>1.c)</u>Brainstorming ideas to improve Hopscotch:

Though the game is really fun for kids, Adults get bored of the game soon as it is too simple. I want to improve the game so that it is fun and engaging for adults as well, like fellow ETC-ers. The following is the list of ideas that I believe, can make the hopscotch game better for adults too.

<u>Target Demographic:</u>Adults and kids-alike (e.g. - ETC students)

Target Genre: Casual-party

Mechanics

- 1. After each jump, players must land in unique freeze-poses.
- 2. Multiplayer version of the above mentioned mechanic players must land in the same pose as each other, by communicating before each jump.
- 3. The competition between players can be based on Time. Sooner you complete the course, higher the points you get!
- 4. Co-operative team battle A: Players are split into two teams and collectively scored to see which team wins.
- 5. Simultaneous hopscotch competing players start at the same time at opposite ends.
- 6. Co-operative team battle B: Players are split into teams of two. Each round, both players in the team start the course together at the same time at opposite ends.
- 7. Play the game with your eyes blind folded.
- 8. Co-operative team battle C: Players are split into teams of two. One player starts the course, while the teammate guides using vocal commands.
- 9. Players can hop in reverse for extra challenge
- 10. Upto 4 players can play together in a competitive manner, on a "Ludo" style course.
- 11. Drawing special action cards that contain special constraints/power for players every round.
- 12. Can be converted into a board game where players sit around a table and play with their fingers.
- 13. Players can bet coins on each other's success or failure.
- 14. Hopping while balancing a lemon on a spoon held by one's mouth.
- 15. Each round, the number of markers you throw increases.

- 16. Players have to aim and throw the stone at a particular square.
- 17. A dice can be used to decide which square the stone should be thrown at.
- 18. Hopscotch can be combined with Dodge ball. Two parallel courses can be drawn and players hopping in the courses can throw soft balls at each other.
- 19. Player has lives, every mistake costs a life. Player is eliminated if he loses all his lives.
- 20. If developed as video game using Xbox-Kinect, the squares can be dynamic change.
- 21. In the video game, the squares can move.
- 22. In the video game, the squares can change in size.
- 23. When played as a music game, the players must time their jumps based on the musical cues (like Rock band)
- 24. In videogame, the hopping gesture can be expanded to feed any gameplay mechanic like accelerating a car in racing car and hopping side-ways to avoid obstacles etc.

Technology

- 25. Like in twister, Use a mat that has the course drawn on it and can be laid down on the ground.
- 26. Use Xbox-Kinect to play a local multiplayer virtual hopscotch like dance central.
- 27. Play against friends, remotely via internet using Kinect.
- 28. Using a set of cards as action cards.
- 29. Using empty tires laid flat on ground like in a military training course.
- 30. Playing the game on a large trampoline
- 31. Using a skipping rope every time a jump is made
- 32. Play the game in a swimming pool, using inflatable floats as squares
- 33. Play using tall-and-wide wooden-stumps placed firmly in the ground
- 34. Played as a music game
- 35. Played as a simple mathematics game for kinder gardeners, while squares representing sequence numbers and arithmetic operations.
- 36. Played on a giant chess board with players choosing between white and black tiles.

Story

- 37. Players are escaping from a swamp filled with quick sands and rocks.
- 38. Pirate Treasure hunting between islands and the oceans.
- 39. Space journey across planets where some planets are poisonous and some are safe.
- 40. Underwater expedition
- 41. Obstacle course with traps and electrocution danger
- 42. If more than one course is drawn, then the story could be played as a knockout tournament between players advancing from easier to difficult courses.
- 43. Story of BVW, with each squares being a round.

Aesthetics

- 44. The course can be drawn in a circular fashion
- 45. Numbers or alphabets can be drawn in the squares for teaching kinder gardeners.
- 46. Using a printed-mat like 'twister' could drastically improve the aesthetic nature of the game.
- 47. The swamp story can have quick sands, rocks and home drawn on the course.
- 48. The space story can have a planet drawn instead of squares. The poisonous planets are indicated with images of poisonous gases, hazard/danger symbol etc.
- 49. The Pirate story can have a golden trinket as the stone/treasure. Each square can be island or part of an island. The general space of the course can be the ocean.
- 50. The obstacle course can be designed in sci-fi manner with dangerous traps and electric fences around the squares.
- 51. The video game version can have different environment for each level like Canyon, volcanic river, river with rocks, an Olympic tournament etc.

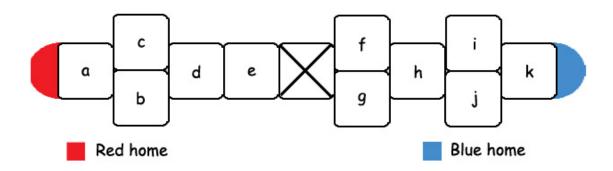
PART 2

The brainstorm helped me identity various ideas which can improve hopscotch and make it more fun for adults and kids alike. I chose three ideas which seemed most fun and easy-to-implement. These ideas are fully developed and detailed below.

2.a)Two-sided Hopscotch

Game setting:

The players are split into teams of two. Each pair will play the course at the same time. The course has to be modified to fit two-sided playing. The image gives a layout of the two-sided hopscotch.



How to play:

- I. Each team has two players.
- II. Every round, one player starts in the blue home and the other player starts in the red home.
- III. Each player throws their own stone in one of the squares.
- IV. They hope towards their home in the other end of the course and on their way back they have to retrieve their respective stones.
- V. The square in the middle must be skipped.
- VI. They would meet at one of the squares in the middle. They would have to cooperate using a strategy how to cross each other without making a mistake like stop-hopping, stepping on a boundary, hopping-on-the-skip-square or even falling down.
- VII. If even one of the players make a mistake, their forfeit their turn. The next team would try.

- VIII. Every round, the time taken for a team to complete the course is noted down. The team with the least time gets a point.
 - IX. The game can be played for any number of rounds. The team with the most points wins the game.

Analysis:

- I. Hopping is fun. But hopping co-operatively with your teammate in the same square without making a mistake is even more fun.
- II. As players throw the stone in different squares, the difficulty to cross each other changes.
- III. The course is designed asymmetrically with a skip-square in the middle. This creates a variation in the gameplay based on when they want to cross each other while hopping.
- IV. The game does not get boringly long as it can be closed after any round; the point system reveals the current winner.
- V. The time constraint forces people to play faster and hence it will be more fun as people tend to make more mistakes under pressure.
- VI. The players hopping and crossing each other is a fun thing to watch. Hence the teams who are waiting for their turn are entertained.
- VII. This game offers them a choice of strategy. They have to plan where to throw their stones and how to cross each other based on squares they are on.

2.b)Pose Hopscotch

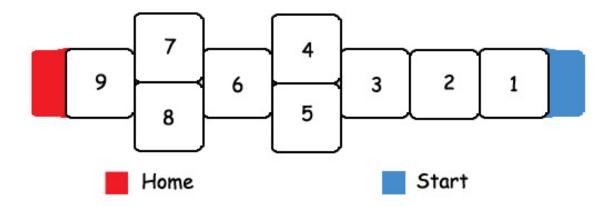
The pose hopscotch involves player landing in a pose every time they hop into a square. Each pose must be unique and unused before in the current round. Landing in the same pose as before will be considered as a mistake, just like usual mistakes in hopscotch.



2.c) Blind-folded Hopscotch

Game setting:

The players are split into teams of two. Each pair will takes turns in playing the course. The default course is used in this version. In this version, the player who is hopping will be blindfolded. Hence to make it easy, the squares can be drawn bigger than usual.



How to play:

- I. Each team has two players.
- II. Every round, one player plays the course blindfolded while the other player assists him.
- III. The player starts hopping blindfolded and the other can assist him verbally.
- IV. The player must hope towards the home in the other end of the course and on the way back, retrieve the stone all blindfolded.
- V. If the player makes a mistake, the player tries. The team forfeits their turn if both players make mistakes. Then the other team scores a point.
- VI. The game can be played for any number of rounds. The team with the most points wins the game.
- VII. A time constraint can also be added to increase the competition between teams.
- VIII. The game can be made interesting by drawing two courses near each other and two teams can start playing at the same time. Now it would be noisy and confusing for both the blindfolded players as they have to concentrate and listen only to their respective teammates.

Analysis:

- I. Blindfolded hopping is really fun. Added to that, listening to the instructions of your teammate as you hop, makes it an interesting challenge. As players throw the stone in different squares, the difficulty to cross each other changes.
- II. The team must brainstorm efficient ways to communicate so that they finish the cross sooner than the other teams.
- III. The game does not get boringly long as it can be closed after any round; the point system reveals the current winner.
- IV. The time constraint forces people to play faster and hence it will be more fun as people tend to make more mistakes under pressure.
- V. The other teams can decide to watch the current team playing or they can start playing simultaneously in the nearby course.
- VI. This game offers players an agency to plan and strategize.

PART 3

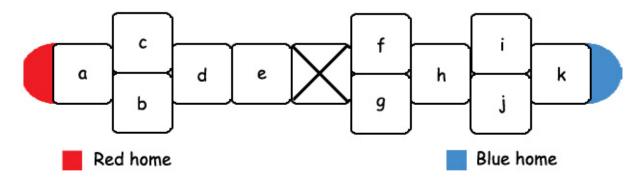
Of the three variants that I designed, I am most excited about the **Pose-hopscotch** game as it would be really fun and entertaining for the players as well as the people watching. It gives a creative satisfaction to pose after every hop. Hence I have detailed below my initial design as well as changes made based on the playtest results.



3.a)Pose Hopscotch v.1 - Complete rule-set

Game setting:

The players are split into teams of two. Each pair will play the course at the same time, starting at opposite ends. The course has been modified to fit two-sided playing.



How to play:

- I. Each team has two players, one player starts in the blue home and the other player starts in the red home.
- II. Each player throws their own stone in one of the squares.
- III. They hope towards their home in the other end of the course and on their way back they have to retrieve their respective stones.
- IV. <u>Important constraint:</u> For every hop, both players must land in the same pose as each other.
- V. They would meet at one of the squares in the middle. They can use the skip-square to cross each other.
- VI. If even one of the players makes a mistake or fail to land in the same pose, the other team scores a point. But the current team continues to play.
- VII. The game can be played for any number of rounds. The team with the most points wins the game.

Analysis:

- I. Landing in the same pose while hopping an interesting challenge which is satisfying to solve.
- II. The course is designed asymmetrically with a skip-square in the middle. This creates a variation in the gameplay based on when they want to cross each other while hopping.
- III. The game does not get boringly long as it can be closed after any round; the point system reveals the current winner.
- IV. The time constraint forces people to play faster and hence it will be more fun as people tend to make more mistakes under pressure.

V. The players creatively coming up with different poses is interesting to watch. Hence the teams who are waiting for their turn are entertained.

3.b)Playtesting v.1

I play-tested the initial version, with my ETC classmates. I learnt a lot about the game and got some valuable feedback about what worked and what needs to be tweaked.

Playtest Photos:







Feedback and Observations:

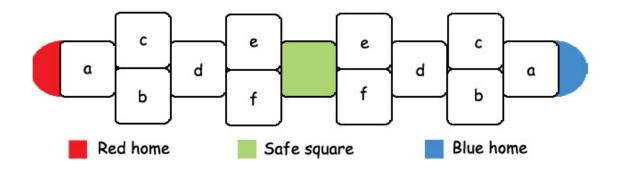
- I. Playtesters loved the pose feature. They enjoyed coming up with different poses.
- II. Seeing the other teams complete the courses with all the poses was very fun to watch.
- III. Pose feature created a variation in the gameplay that kept the game fresh and exciting.
- IV. The point system gave the freedom to close the game at any point.
- V. Asymmetric course does not work well as players find it hard to mimic poses.
- VI. I observed that one person always took lead while posing and his/her teammate just copied him.
- VII. The players started to repeat the same pose after a while.
- VIII. As there was no time constraint, people took time to come up with poses. This made the game slow.
 - IX. The skip square became an inconvenience and broke the experience.
 - X. I also observed that, after crossing each other, the players preferred to turn back to face each other and hopped backwards.

Changes to be made:

- I. The course has to be made symmetric.
- II. A mechanic must be introduced to prevent people from copying each other's poses all the time.
- III. Players should not be able to repeat the same pose again.
- IV. A time constraint must be introduced to keep up the pace of the game.
- V. The skip square must be removed and it should be made easy for the players to cross each other.

3.c)Pose Hopscotch v.2

Based on the feedback, I have updated the rule set of the game. The course has been made symmetric with a safe square in the center.



Updated rule set:

- I. Each team has two players who start at opposite ends of the course.
- II. Each player throws their own stone in one of the squares. They must hop and retrieve their own stones simultaneously.
- III. For every hop, both players must land in the same pose as each other.
- IV. <u>Change 1</u>: Both players must time their jumps together and land in the same pose at the same time. They must not repeat any poses from the current round.
- V. <u>Change 2</u>: The skip square has been replaced by a safe square, where players can conveniently cross each other.
- VI. <u>Change 3</u>: The time taken for the team to complete the course is noted. The team that took the least time scores a point.
- VII. The game can be played for any number of rounds. The team with the most points wins the game.

Analysis:

- I. To prevent players from coping each other's pose, players are asked to jump at the same time.
- II. The safe square at the center is for players to cross each other conveniently.
- III. Time constraint now forces players to play quickly, thus maintaining the pace of the game.

3.d)Playtesting v.2

I play-tested the upgraded version, to verify if all the changes worked well. I was able to see what worked and what didn't work.

Playtest Photo:



Feedback and Observations:

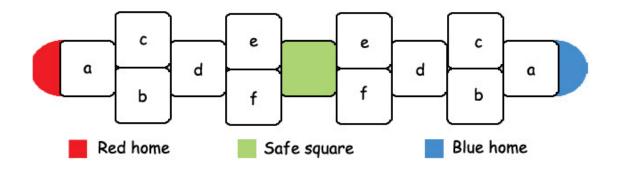
- I. Symmetric course worked really well and people felt really convenient crossing over at the safe square.
- II. Time constraint definitely helped to maintain the pace.
- III. I observed that players communicated with each other before jumping. It was fun to see the game promoting social interactions.
- IV. The waiting teams were observed to be strategizing and planning.
- V. Scoring systems is not efficient. It has to be tweaked.
- VI. Throwing stone mechanic reduces the fun quotient of the game. It can be removed or modified.

Changes to be made:

- I. Tweak the scoring system.
- II. "Throwing Stone" mechanic can be removed.

3.e)Final version

Based on the feedback, I have the final rule set of the game.



Final rule set:

- I. Each team has two players who start at opposite ends of the course.
- II. <u>Change 1</u>: Instead of throwing stones, each player just places their own stone in the respective squares. They must hop and retrieve their own stones simultaneously. This removes the penalty of not throwing within the boundary.
- III. For every hop, both players must time their jumps together and land in the same pose at the same time.
- IV. The players can use the 'safe square' to conveniently cross each other without hopping or giving a pose.
- V. The time taken for the team to complete the course is noted.

- VI. <u>Change 2</u>: Scoring system: If the players do not land in the same pose or they hop on the boundary line or they forget to skip the square which has their stone, then they forfeit their turn.
- VII. <u>Change 3</u>: Every round, the one and ONLY team that completes the coursewithout making a mistake in the least time, scores a point.
- VIII. The game can be played for any number of rounds. The team with the most points wins the game.

Analysis:

- I. Hopping is fun. It becomes creatively more fun and satisfying to land in a different pose every time you hop.
- II. Posing is a simple mechanic which kids and adults can understand and implement immediately.
- III. Players have to plan and co-ordinate their jumping, so that they can land in the same pose at the same time this creates a fun variation in the gameplay.
- IV. The game offers enough agency for the players to collaborate and strategize.
- V. Players face each other half of the round and they face away from each other for the remaining half.
- VI. This could lead to interesting moments as they have to efficiently communicate with each other. The game encourages social interactions.
- VII. The symmetrical-course with a safe square at the center and removing the "throwing stone" mechanic, allow players to concentrate on the main feature of the game posing.
- VIII. The players creatively coming up with new poses, is really fun to watch. Hence the players who are waiting for their turn are also entertained.
 - IX. Point system is really efficient and lets players close the game whenever they feel convenient.

Thus from the playtests, it is evident that 'Pose Hopscotch' is a fun version of hopscotch, that can be enjoyed by both kids and adults together.