

# ZKU Final Project - zkGuessWho

## Report 1

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repo: <https://github.com/elmol/zk-guess-who>

video:

### ZK Guess Who Game

The game is a variant of the “**guess who**” game [https://en.wikipedia.org/wiki/Guess\\_Who%3F](https://en.wikipedia.org/wiki/Guess_Who%3F) . A two player game where they try to identify the other's chosen character. Zk proofs is used to keep the characters and the game privacy

### Scope

For the ZKUC03 final project proposal: As I mentioned above, the **zkGuessWho** characters board is hard coded to **6x4** numeric characters. Characters are defined by a set of **4** numeric characteristics. Characteristics contain **4** numeric variants between **0-3**.

Random board generation, graphical characters, and NFTs are out of the scope.

### Deadlines

- June 27: testnet launch
- July 4: mainnet launch
- July 11: late mainnet launch (60% of prize)

### Road Map

#### Perpetual Game Delivery (working on)

Have a perpetual game with one board shared where anyone can guess. The board was initialized one time by the owner (me). The owner is responsible for answering the question.

#### Master and Guesser Delivery

Have only one room game with one board where two players (creator and guesser) can interact. The creator creates the game selecting a character and the guesser makes questions that the creator should respond to. The game finishes when the guesser guesses the character and the room is free.

Targets:

#### One Room Delivery

Have only one room game but with two boards playing by turns, player 1 should guess the player 2 character and vice versa, game finish when a player guesses the other player character.

### Final Delivery

Multi room game complying with the proposal of the final project.

### **Observations**

As you can see in the road map I 've splitted the final project into 4 incremental deliveries. My idea is to have these deliveries deployed in testnet so I can get feedback from mentors. If there is no problem I'll ask for a review from mentors each time that a delivery is done. I have not yet, but I would like to have a kanban dashboard where I can share the tasks that I am working on. Also I think this is important because I'll be iterating over all the game code, for example I've to split and improve the circuits and I'd like to share with you this work to be done.

### **Current State**

As I've been working on the first delivery **Perpetual Game Delivery** basically I've created all the project scaffolding, basic circuit, contract and frontend components and I've been focused on all the game integration and basic game messages interactions. I expect to deliver it on the first days of next week.