Stackhead Requirements Document

# Stackhead Requirements:

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| Requirement Number | Description | Met? |
| REQ1 | Game must be able to generate a deck of cards | Yes |
| REQ2 | Game must be able to deal out cards to a given hand, including 3 to a hand, 3 to display face up, and 3 to go hidden (face down) | Yes |
| REQ3 | Game must be able to shuffle the generated deck | Yes |
| REQ4 | Game must show the player their given cards and allow them to choose a card to play | Yes |
| REQ5 | Game must evaluate if a player-chosen card is playable | Yes |
| REQ6 | Game must evaluate if a hand is playable (both player and opponent) | Yes |
| REQ7 | Game must keep evaluate whether the deck and stack are empty or full | Yes |
| REQ8 | If the deck and stack are empty, game must prompt player or opponent to play the first card | Yes |
| REQ9 | If the deck is not empty, game must deal to player or opponent to ensure at least 3 cards are in their hand at any given time, and not deal if more than 3 in hand | Yes |
| REQ10 | If the deck is not empty, but the stack is, game must deal a card from the deck to serve as a starting card | Yes |
| REQ11 | Game must accept a 2 being played in any situation as it resets the stack | Yes |
| REQ12 | Game must accept 3 being played in any situation as it imitates the card below it | Yes |
| REQ13 | Game must request a card below or equal to 7 if the top card/last played card is a 7 | Yes |
| REQ14 | Game must skip a turn/give a double turn when an 8 is played (dependent on REQ5) | Yes |
| REQ15 | Game must burn (all cards in the stack leave the game, burning player is given another turn) if a 10 is played (dependent on REQ5) | Yes |
| REQ16 | AI Opponent must prioritise special cards 2 & 3, and only play them when other cards are unplayable | Yes |
| REQ17 | Game must evaluate if a players hand is empty and give them the choice of which face up card to play (dependent on REQ8) | Yes |
| REQ18 | Game must evaluate if a players face up cards have been played and give them a choice of which face down (hidden) card to play (dependent on REQ8 & REQ17) | Yes |
| REQ19 | Game must burn (all cards in the stack leave the game, burning player is given another turn) if a card is played 4 times in a row | Yes |

# Stackhead Rules

## General

* While the deck has cards in it, all players must have at least 3 cards in their hand
  + After a card is played, the player must pick up a card if there are cards in the deck and less than 3 in their hand
* If the stack is empty and the deck still has cards in it, the starting/bottom card comes from the top of the deck
  + If the deck is empty, then whoever’s turn it is starts the round by playing any card they want
* If four cards of the same value are played in a row, they burn, meaning the stack is out of the game and cannot be picked up or re enter the game in anyway.
  + For example, if a player puts a 5 on the stack, and the next 3 turns all result in a 5 being played, it burns

## Cards

Stackhead works by each player putting a card on top of the stack that is equal to or higher than the current top card, most cards have their own normal value but there are some special cards that can be played too.

* 2, as the lowest card will reset the stack, so it can be played anywhere
* 3, is an invisible card, so it will imitate the card below it
  + For example, if a 3 is played on a 9, that 3 is now a 9
* 4 is just 4
* 5 is just 5
* 6 is just 6
* 7 is 7, but means the next player must player lower than or equal to a 7
  + For example, a 4 is playable if the last played card is a 7, and so is another 7, but an 8 or anything higher is unplayable because they’re higher than 7
  + A 3 played on a 7, will be another 7
* 8 will skip a turn, if you play an 8, the next player is skipped, if it is just 2 people playing, you get a double turn
* 9 is just 9
* 10 burns, if 10 is played, all cards in the stack are now out of the game, and cannot be picked up or re enter the game in anyway
* Jack is just Jack
* Queen is just Queen
* King is just King
* Ace is just Ace