

Sprint 2 Requirements Descriptions

Requirement 4.1

The GUI for roulette must display, alongside control buttons like “start” and “leave”, two main items. First, it must present a wheel graphic that is capable of spinning. The wheel must have numbered slots from 0 to 36(see below), with numbers being of the colors shown below. Second, it must present a European styled roulette board, with all the elements shown in the graphic below.

0	3	6	9	12	15	18	21	24	27	30	33	36	2 to 1 2 to 1 2 to 1
	2	5	8	11	14	17	20	23	26	29	32	35	
	1	4	7	10	13	16	19	22	25	28	31	34	
1 st 12				2 nd 12				3 rd 12					
1 to 18		EVEN						ODD		19 to 36			



Requirement 4.2

A user playing roulette must only be allowed to bet from the supply of chips they take with them into the game. Of course, any chips being bet should not be immediately considered “lost”. They should only be considered lost upon losing the gamble or upon forfeit.

Requirement 4.3

A user should be able to place chips, either through dragging or by selection, directly onto a number space on the board. A bet on a single number should be mapped to a payout thirty-five times the initial bet.

Requirement 4.4

A user should also be able to place chips on the border between two number slots. This specific betting place should be the midpoint of the adjacent border. This signifies a bet that the wheel will land on either of these numbers. This bet should map to a payout seventeen times the initial bet.

Requirement 4.5

A user should be able to place chips at the “far” edge of a three numbered row(furthest from the 12 boxes). This is a bet that the wheel will land on one of the numbers in the row. This bet must map to a payout eleven times the initial bet. The midpoint of the edge should be used as a betting point to prevent overlap.

Requirement 4.6

A user should be able to place their amount on the intersection point of four numbered spaces, preferably in a space that avoids overlap with other betting spaces. This signifies a wager that the wheel will land on one of these four numbers. This bet maps to a payout of eleven times the initial bet.

Requirement 4.7

Due to the existence of the zero space at the left end of the board, it should be possible to place chips on the intersection point between either the 0, 1, and 2 spaces; or the 0, 2, and 3 spaces, denoting a bet on the wheel landing on one of the three numbers. This bet should map to an eleven times payout.

Requirement 4.8

At the far edge of the board, the same area described in requirement 4.5, placing a chip on two adjacent spaces should be considered as a bet on both rows (wheel lands on one of the six numbers in the rows). This maps to a five times payout.

Requirement 4.9

A user should be able to place chips on the red or black box, signifying a bet that the wheel's number will be black or red. This bet must map to a one times payout (if the user bets one chip, they will receive a chip on success—they have not been deducted a chip as of yet).

Requirement 4.10

A user should also be able to place chips in the odd or even boxes, signifying a bet that the resulting number will be odd or even respectively. This also results in a one times payout.

Requirement 4.11

The player should be able to place chips in the "1-to-18"—signifying a bet that the resulting number is between 1 and 18—or the "19-to-36"—a bet that the number is between 19 and 36—boxes. This bet must map to a two times payout.

Requirement 4.12

The player should be able to place chips in the 1st, 2nd, or 3rd 12 boxes, signifying a bet that the resulting number falls between the first, second, or third twelve number intervals. This bet maps to a two times payout.

Requirement 4.13

The player should also be able to place chips in the boxes to the right in the provided image. These spaces bet on the corresponding column, and map to a two times payout.

Requirement 4.14

After a user is content with their bets, they should be able to press a button to spin the wheel. The GUI must depict the wheel actually spinning and landing on a number slot. This resulting number must be randomly determined for maximum fairness.

Requirement 4.15

There is a special case when the wheel lands on 0. In this instance, all bets placed in the even box must be considered to be lost.

Requirement 4.16

Once the wheel has finished and a resulting number has been chosen, this number must be used to validate or invalidate all bets placed by the user. Any bets that include this number must be rewarded according to the payouts specified above.

Requirement 4.17

Any bets that do not include the wheel-selected number must be deducted from the user's chip balance. A user should only be subject to forceful exiting to the main menu after all awarding and deductions have occurred.

Requirement 4.18

The user must be free to return to the main menu at any time in the process. Doing so must reset the roulette state. However, any chips placed on the board will be considered forfeit and deducted from the user's balance if they are leave before or while the wheel spins.

Requirement 4.19

The user must have available to them a button that will allow them to view a brief introduction to roulette, its rules, and payouts upon request.