

CS451 - SomeRandomTeam - Architecture Document

maze

array of rows of cells

each cell has position struct (int x, y) and type (char)

dim_x and dim_y for dimensions of maze

client

-timer regulating how often player can make a move

-client timer starts once the client makes a move request to the server

client loop:

makeRequest()

timer()

acceptPrompt()

makeRequest:

-test if player is free

-test if new square is not a wall

-if both conditions are met, send the request to the server

server

-timer regulating how often updates are broadcast

server loop:

sendUpdate()

timer()

server loop:

acceptRequest()

sendConfirmation()

updateState()

acceptRequest:

- trusts that square is not a wall (so don't recheck)

- still have to check if player is in jail

- if jail, send reject to client

- otherwise, confirm move

updateState:

- update all new player and game states based on the new move

- possible updates are those listed in the player actions in specification

- test if game has met a win condition

sendUpdate:

sends an array with all player states + attributes and whether the game is won or tie