Homework 1 - "Maze" Game - part 1

Name: Gabriela Tolosa Ramirez
SID: 108971986

Player:

Player(const std::string name, const bool is_human);	Initialize Player with a given name and whether it is a human or not
void ChangePoints(const int x);	Update ‘points_’ value according to int going in
void SetPosition(Position pos);	Update ‘pos_’ based on the players new position
std::string ToRelativePosition(Position other);	Translate the other position into a direction relative to the player by comparing ‘other’ with ‘pos_’

Board:

Board();	Generate a square board for player to move on
SquareType get_square_value(Position pos) const;	Generate the square value based on ‘pos’
void SetSquareValue(Position pos, SquareType value);	Set the value of a square to the given SquareType
std::vector<Position> GetMoves(Player *p);	Generate the possible Positions that the player could move to -- can’t go into a wall or off the board
bool MovePlayer(Player *p, Position pos);	Move player to new position ‘pos’ and return bool according to the success of the move.
SquareType GetExitOccupant();	Get the square type of the exit square

^ Most of these will be reliant on Maze and how that is generated -- where the walls are, where the enemy is, and the type of the exit square

Maze:

Maze();	Construct a ‘Maze’ based on the ‘Board’

void NewGame(Player *human, const int enemies);	Given a human Player object and a number of enemies, generate a new game
void TakeTurn(Player *p);	Given player ‘p’ take turn
Player * GetNextPlayer();	Get the next player in turn order
bool IsGameOver();	Return true if the game is over -- human made it to the end or enemies defeated human