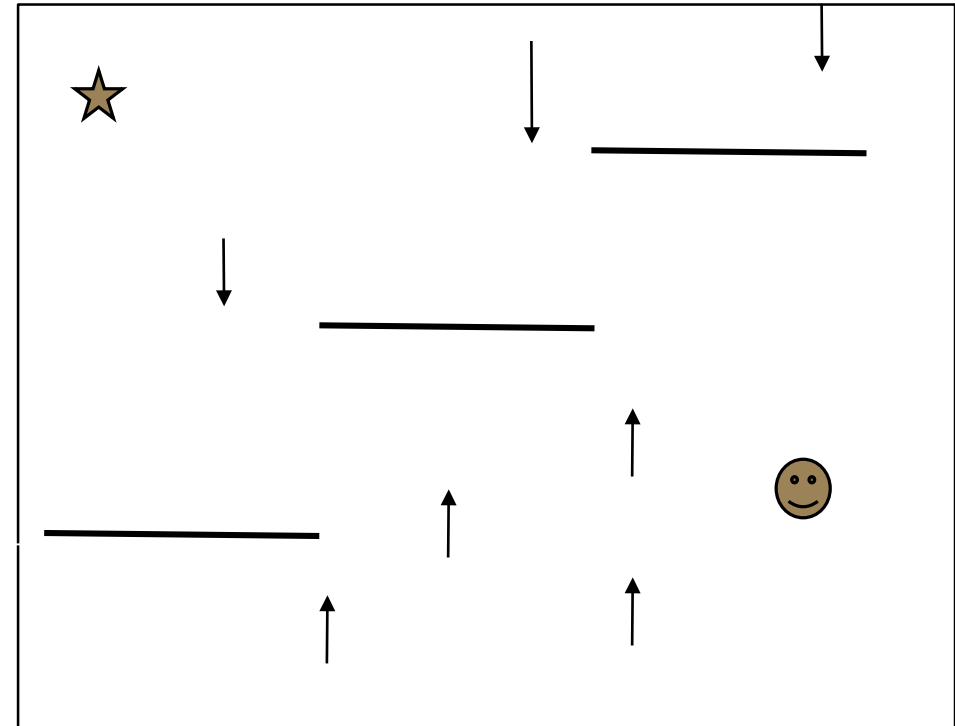# Run and Shoot App

Presented By: (Group D)
Firoozishahmirzadi Parichehreh
Layeghi Mahsa
Xu Jin
El-Habrouk Jaser

Review on Run and Shoot Game

A simple map can look like this:

- Destination ⭐
- Player 🙂
- Barrier ___
- Arrows ↑

The map is definitely not graphically intensive. This is just for demonstration purpose

Initial definition of the function

*   Assigned to: Mahsa

*   Check if there is any barrier on the way of player.

*   Input: player, barrier

*   Output: 0 ---> player no hit & 1---> player is hit

*   Return: int

- int isBarrierHit(Player player, MapBarrier* barrier_p, MapSpace space);

Changes and Updates

- Coding Conventions
- Project Requirements
- Our need

- int isBarrierHit(Player player, MapBarrier* barrier_p, MapSpace space);

- bool is_barrier_hit(map_t map, direction_t direction);

Function

- This function is basically used to predict the player's collision with any barriers

- bool is_barrier_hit(map_t map, direction_t direction);

- Input 1: map

- Input 2: direction

- Output: bool

```c
typedef struct map {
    map_space_t space;
    int number_of_barriers;
    int number_of_arrows;
    map_barrier_t barrier[MAP_MAX_NUM_OF_BARRIERS];
    arrow_t arrow[MAP_MAX_NUM_OF_ARROWS];
    goal_t goal;
    player_t player;
} map_t;
```

```c
typedef enum direction {
    DIRECTION_RIGHT,
    DIRECTION_LEFT,
    DIRECTION_UP,
    DIRECTION_DOWN
} direction_t;
```

Preconditions

- Initialization of the map using load_map() function.

- Only Allowed Directions(DIRECTION_UP, DIRECTION_DOWN, etc.)

Postconditions

- The return value specifies the permission to move

  - true -> The movement is prohibited

  - false -> The movement is allowed

Testing Strategy

- **Black-box testing**

- 1. Player on the edges of the map and wants to go further:

    -Expected Output: a Boolean value of true (Movement is prohibited)

- 2. Player on Random Position, Wants to move in a direction of an existing barrier:

    - Expected Output: a Boolean value of true (Movement is prohibited)

- 3. Player on Random Position, Wants to move in a direction with no barriers on way:

    -Expected Output: a Boolean value of false (Movement is allowed)

Q & A

Thank You!