

Spike: 1**Title:** Simple Game Loop**Author:** Parth Madhani , 101901858**Goals / deliverables:**

- Code
 - Resources.h
 - WorldProcessor.h
 - WorldProcessor.cpp
 - MoveHandler.h
 - MoveHandler.cpp
 - Source.cpp
- Spike Plan
 - Simple paper design.

Technologies, Tools, and Resources used:

- Visual Studio IDE
- www.cplusplus.com
- Canvas

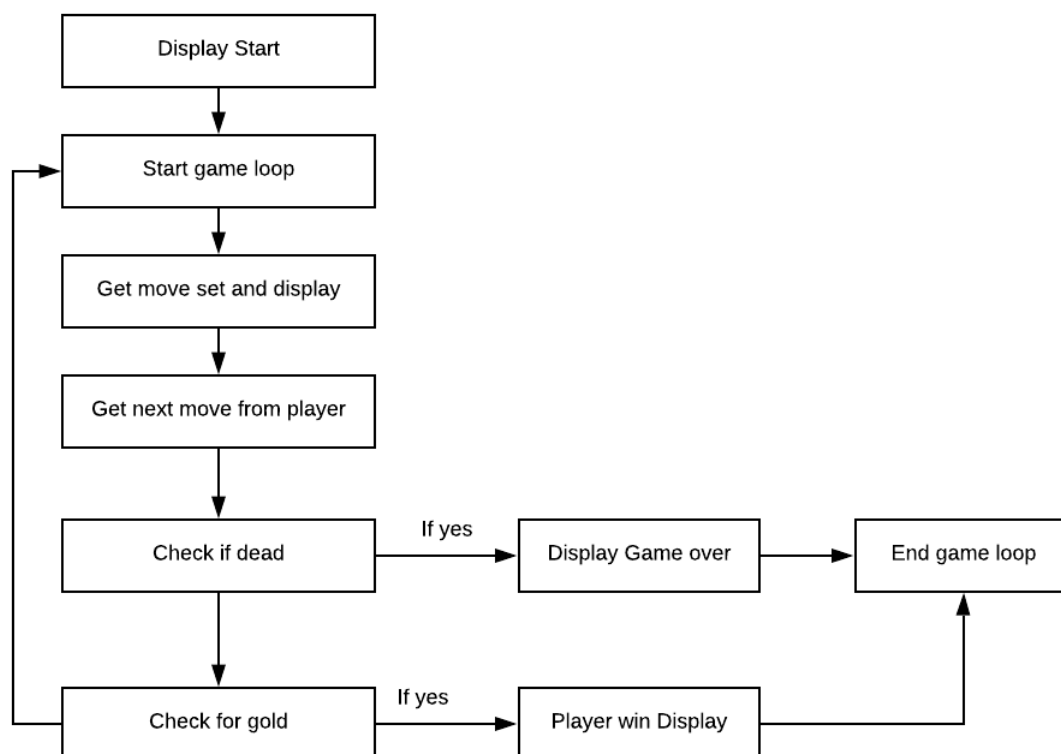
Tasks undertaken:

- Developing a spike plan on paper in order to determine how the program will execute.
- Researching some topics such as 2D array initialization.
- Adding functions step by step while making sure code works.

What we found out:

I found out how to implement a simple blocking game loop using the Visual Studio IDE and C++ as the programming language.

I decided to go straight to an object oriented version of this program by ensuring that our plan was designed for this. For the planning I did a rough sequence in order to plan the flow and interactions of the game.



Basically I created a simple program where a array is used to store the basic map of game. I also decided to add a extra wall so as to prevent player from going south during the start of game.

```
1  #pragma once
2  #include "Resources.h"
3  #include <list>
4
5  class MoveHandler
6  {
7  private:
8      char fMap[9][8] = {
9          {'#','#','#','#','#','#','#'},
10         {'#','G',' ','#','D',' ','#'},
11         {'#',' ',' ','#',' ',' ','#'},
12         {'#','#','#',' ','#',' ','#'},
13         {'#',' ',' ','#',' ',' ','#'},
14         {'#',' ','#','#','#',' ','#'},
15         {'#',' ',' ','#',' ',' ','#'},
16         {'#','#','S','#','#','#','#'},
17         {'#','#','#','#','#','#','#'}
18     };
19
20     Position fPlayerPosition;
21
22 public:
23     MoveHandler();
24
25     bool ValidateMove(Move aMove);
```

```
Welcome to GridWorld : Quantised Excitement.Fate is waiting for You!
Valid commands : N, S, E and W for direction. Q to quit the game.
You can move North, :> N
You can move West, East, South, :> W
You can move East, North, :> N
You can move South, North, :> N
You can move East, South, :> E
You can move West, East, :> E
You can move West, North, :> N
You can move South, North, :> N
You can move West, South, North, :> W
You can move West, East, North, :> N
You can move West, East, South, :> W
Wow - you've discovered a large chest filled with GOLD coins!
YOU WIN!
Thanks for playing.There probably will never be a next time.
```