MARIO.

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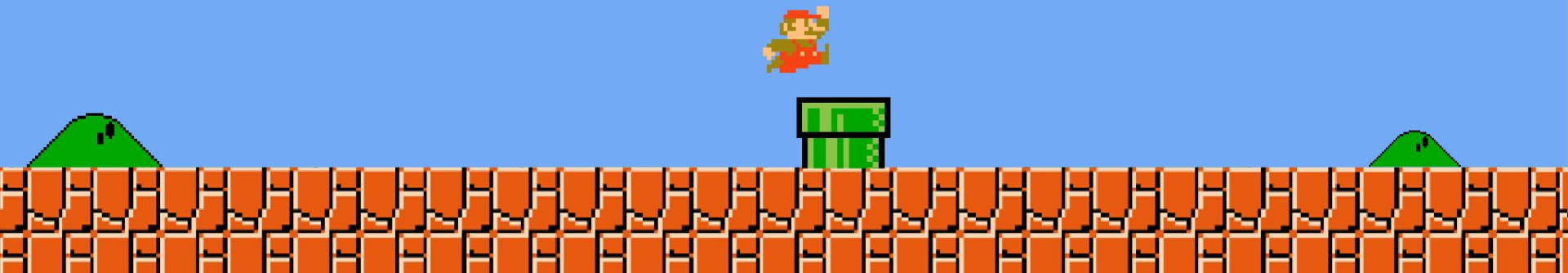
START PRESENTATION

OBJECTIVES

- To apply the concepts of Object Oriented Programming in practical application.
- To implement external libraries like SFML for game development.
- To work and communicate in a team environment.
- To get familiar with version control with git and collaboration tools like GitHub.
- To make a fully functional Mario game which is entertaining to play.

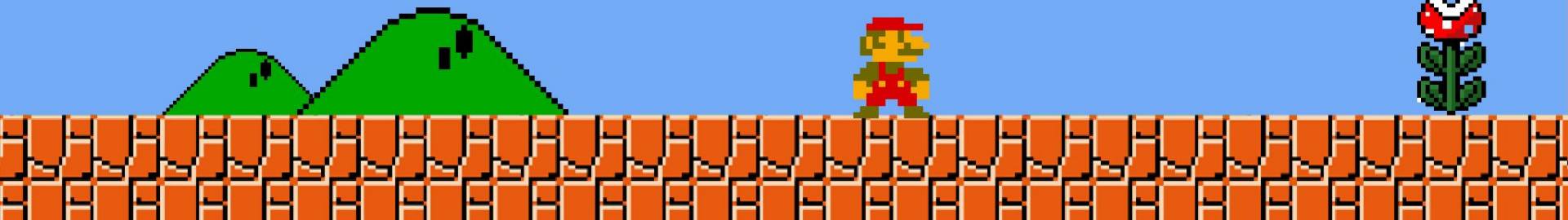
ABOUT MARIO

- One of the most beloved and iconic games of all time.
- Created by Shigeru Miyamoto and introduced by Nintendo in 1985.
- Primarily a platformer game, focusing on precise jumps and obstacle navigation.
- Levels are filled with enemies and power-ups.
- Set standards for platforming and game design.



OUR VERSION

- Simpler version of the original Mario
- Side-scrolling Mechanism
- Scoreboard
- Controlled using Keyboard Inputs
- Enemies, Coins and Power-Up

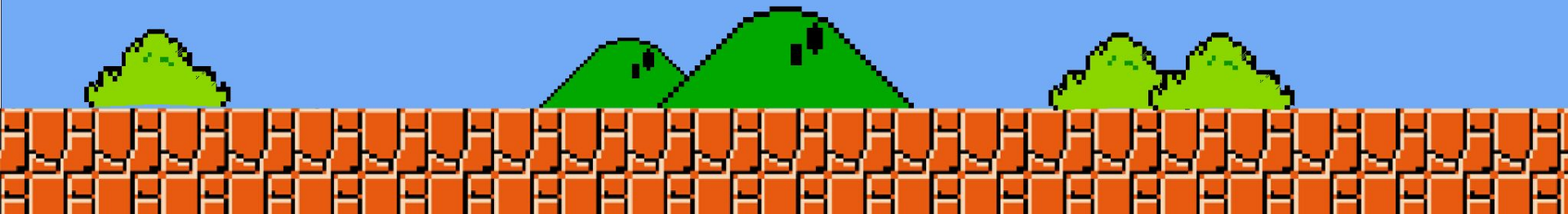


DEVELOPMENT TOOLS

- Visual Studio IDE
- MSVC compiler
- SFML

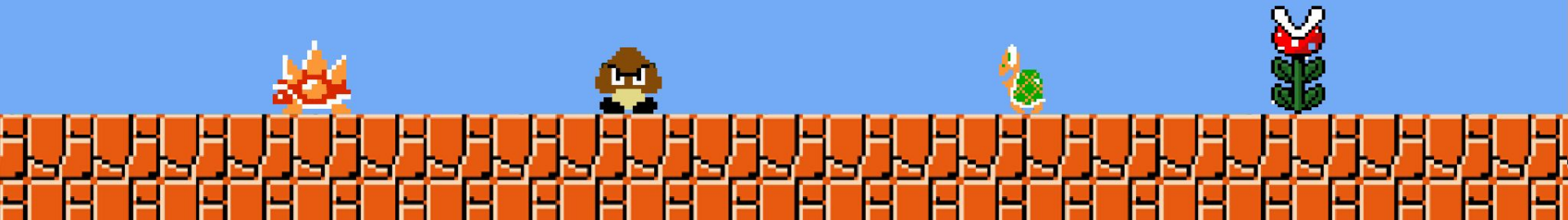
METHODOLOGY

- Resource Gathering and Planning
- System Model and Design
- Software Development
- Testing and Implementation
- Deployment and Documentation



PROBLEMS FACED

- SFML Setup
- Partitioning Code
- Build Errors
- Merge Conflicts
- Improving User Experience



SOLUTIONS.

CODE STRUCTURE

GAME

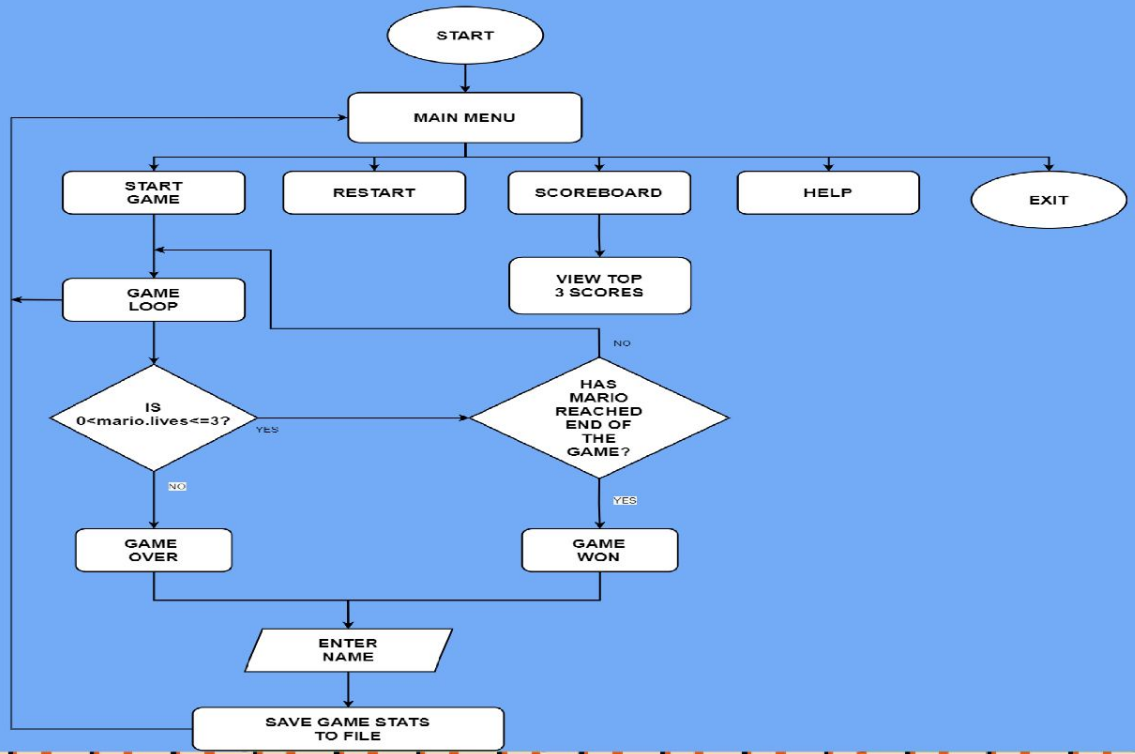
GAMEINFO

MENU

RESULT

TILEMAP

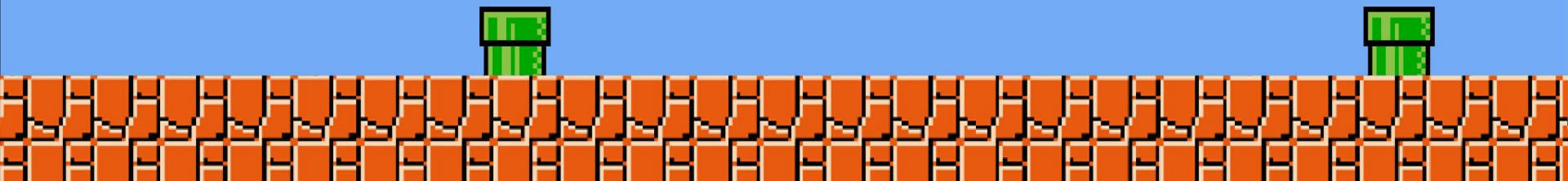
GAME FLOW


START
MAIN MENU
START GAME
RESTART
SCOREBOARD
HELP
EXIT
VIEW TOP 3 SCORES
GAME LOOP
NO
IS 0<mario.lives<=3?
YES
HAS MARIO REACHED END OF THE GAME?
NO
YES
GAME OVER
GAME WON
ENTER NAME
SAVE GAME STATS TO FILE


DEMONSTRATION.

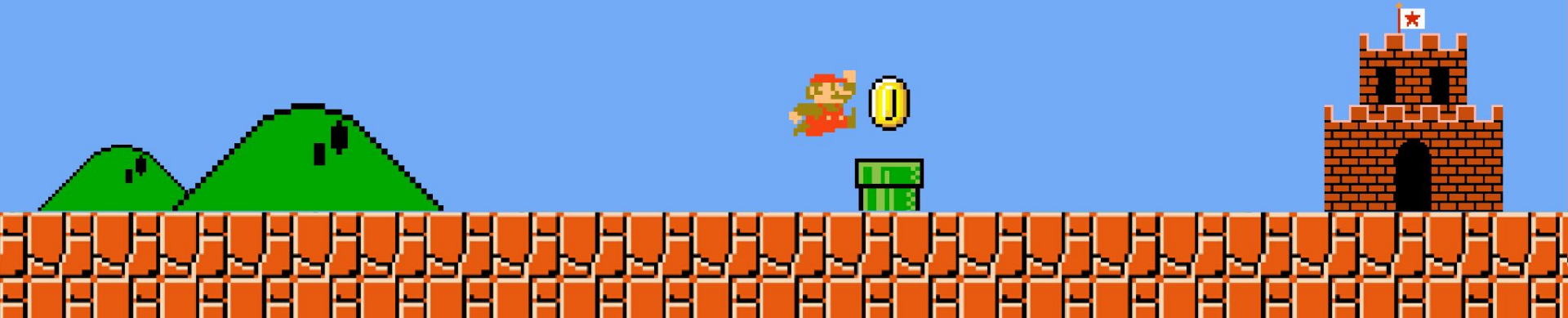
LIMITATIONS AND FUTURE ENHANCEMENTS

- Endless runner
- Different maps
- Animation
- Dynamic screen sizing
- Different power ups.



WHAT WE LEARNED

- Coding is HARD but fun.
- How to apply OOP principles to build an application.
- Basics of game development.
- How to communicate effectively in a team.
- Use GitHub for version control.



THANK YOU.
ANY QUESTIONS?