CALIFORNIA STATE UNIVERSITY
LONG BEACH

Project Group

Matthias Schafter - Christelle Heitzler
Tristan Charpenel - Mathieu Batsalle

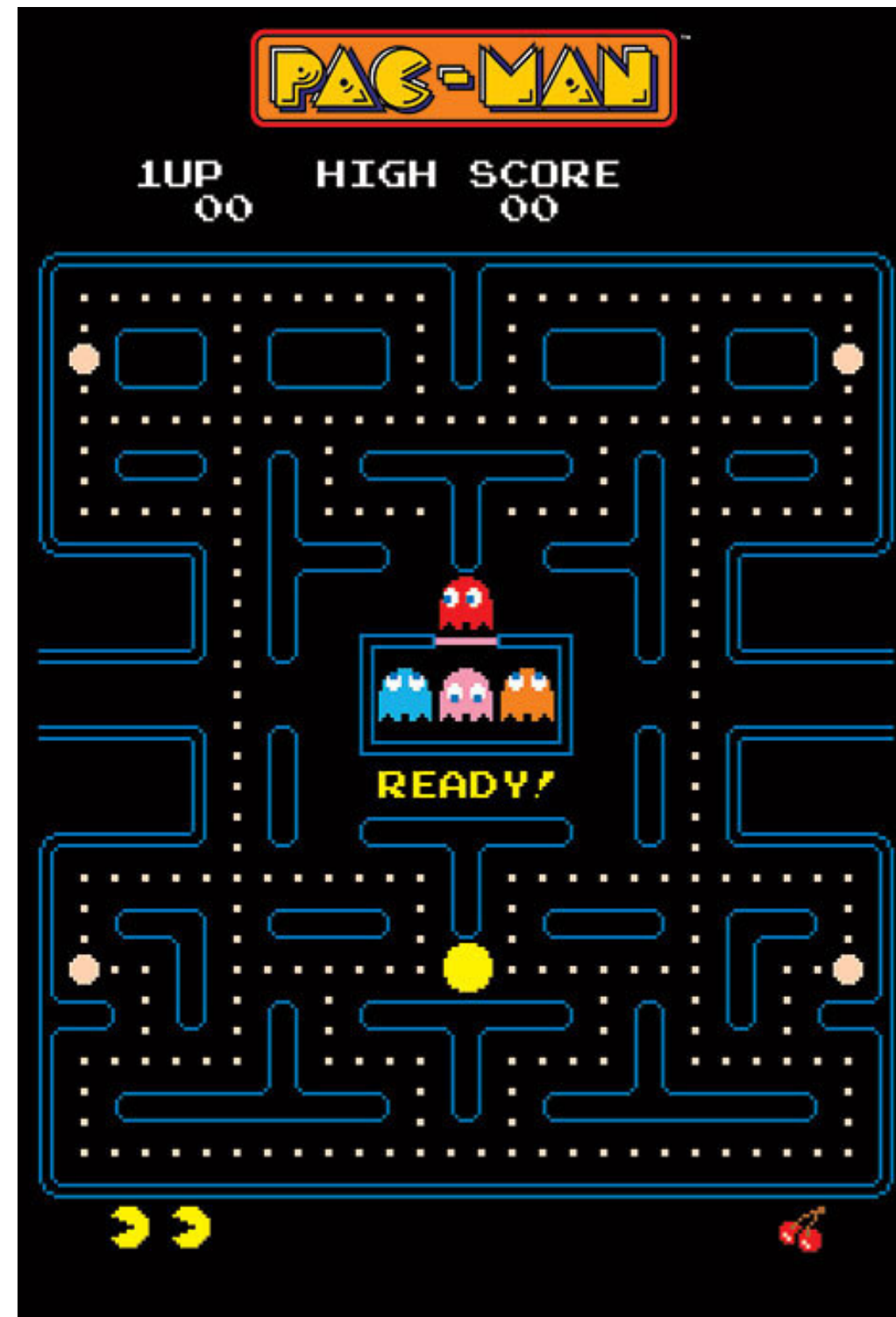PAC-MAN™&©BANDAI NAMCO Entertainm

What is Pac-Man ?

Maze action video game

Developed by *Namco*

Born in 1980

Goals: Eat all dots

PAC-MAN

1UP   HIGH SCORE
 00   00

READY!

Avoid ghosts in the maze

3 lifes

Essential features :

Pacman	Ghosts	Map & Game
• *can move in all directions* • *can eat ghosts* • *can eat yellow balls* • *can eat cherries* • *has 3 lives*	• *have different AIs* • *can move in all directions* • *can eat Pacman* • *Slow down when pacman eats a cherry*	• *The map is filled with yellow balls* • *Pacman can use the door on the right to get to the left and vice versa* • *If pacman is touched by a ghost he loses a life* • *When Pacman eats a yellow ball the score increases*

How did we proceed ?

First Step	Second Step	Third Step
Creation of a Trello	Pair programming	Merge of different parts
Setup of needed features	Development of different parts	Testing game

Difficulties encountered

What's next?

Working in team

Working in a team with people we are not used to was complicated at the beginning.
We have all adapted to each other to move forward together

Peer Programming

Pear programming is always difficult when you are used to working alone
But it is an excellent method to get to know your work partners

Finding the right assets

Finding the exact assets of the original game was a bit complicated. It required a lot of research and wasted a lot of time.

Customization

We could add a customization menu to modify our Pacman, our ghosts, or even the map
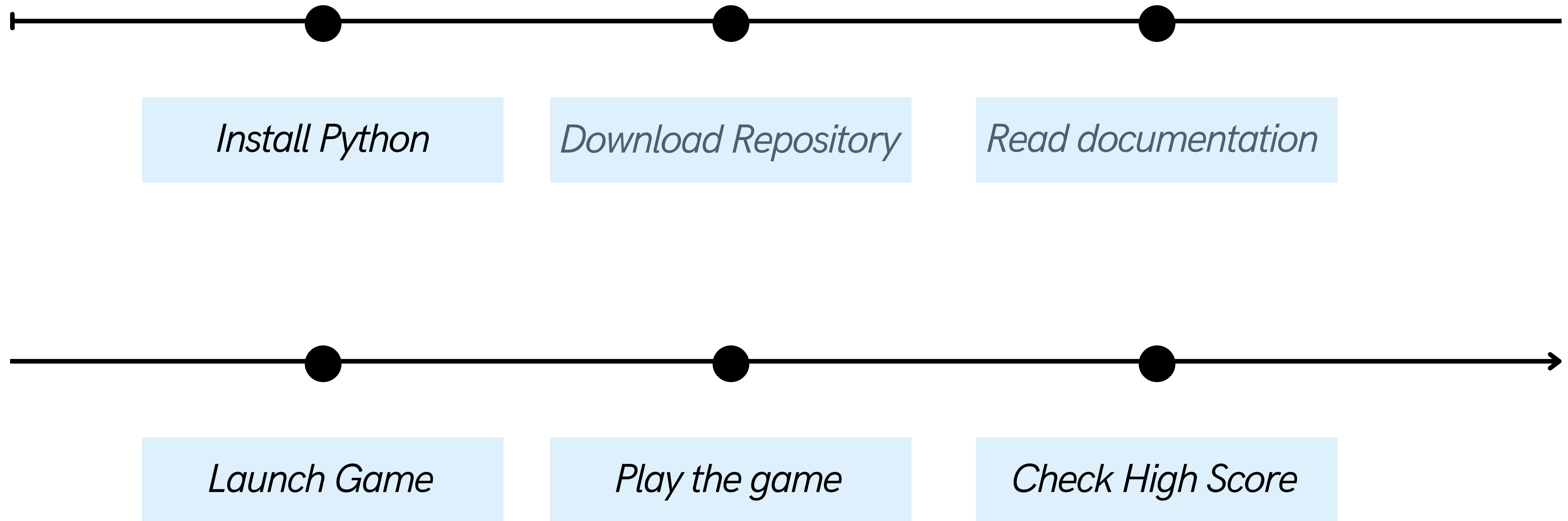
Multijoueur

We could add a multiplayer mode to play 2 on the same computer, or go even further and play several on different computers

Levels

We could add a difficulty by creating levels with handicaps and different maps

Game Process :

```
●───────────────●───────────────●
```

| Install Python | Download Repository | Read documentation |

```
●───────────────●───────────────●──→
```

| Launch Game | Play the game | Check High Score |

User Storie :

| Map card | Mandatory | 3-4 days |

As a developer, I want to create a map where the game will take place.

- Creation of a 2D array.
- Set paths in the maze.
- Set graphical contents.

User Storie :

Pacman card	Mandatory	5 days

As a developer, I want to develop a playable character so that the user could play in the game.

- Implement movement directions
- Implement graphical contents
- Key biding configurations
- Set speed of my playable character

User Storie :

Ghost card	Mandatory	6-7 days

As a developer, I want to develop enemies (ghosts) in order to add some difficulties in the game

- *Implement IA / movement directions*
- *Implement graphical contents*
- *Set attack / vulnerable mode of the enemies*
- *Set speed of ghosts*
- *Set spawn of ghosts*

User Storie :

Berry card	Important	3 days

As a player, I want to gain temporary boost when I am playing.

- Add berry in the maze
- Add temporary performance to the player

User Storie :

Music card	Important	2 days

As a player, I want to listen music while I am playing.

- *Search for music content on internet.*
- *Add music content in a folder.*
- *Add music in the python program.*

Live Demo