Sprint 6

**Sprint period: 25.12.2023 – 05.01.2024**

**Planned Capacity for next Sprint:**

* Bălănică Andrei – high
* Lefter Andrei - high
* Mihăilă Nicolae – high
* Potângă Alexandru-Alin – high

**Burn up Chart**

**Sprint Backlog**

* Develop the First Level. This level should showcase the functionalities implemented so far and serve as a demo for the game (previous sprint) – completed
* Write a script and animations for the Arrow Block trap - completed
* Update the player script to include the Dash ability - completed
* Implement the Spiked Pitfall trap - completed
* Update the player script to include the Wall Jump ability - completed
* Develop the Second Level. It should include the features of the First Level plus the spiked pitfall and the wall jump – in progress
* Develop the Third Level. It should include all game features – in progress

**Sprint Specific User Stories and Acceptance Criteria**

-As an user I want to have access to a first level that is easy so that I can learn the basics of the game  
Given the user in the Scenes folder  
When the user browses available scenes  
Then he should be able to access the Level 1 scene

-As an user I want the game to have Arrow Blocks that shoot harmful balls with spikes so that the game is more challenging  
Given the player in the game  
When the player progresses through the level  
Then the player should encounter Arrow Blocks which shoot balls with spikes that kill him on touch

-As an user I want to be able to dash so that I can face new platforming challenges  
Given the player in the game  
When the player has the dash ability unlocked and presses the dash button in a certain direction  
Then the player should move horizontally in that direction while maintaining the same altitude for a certain distance once before touching the ground again

-As an user I want the game to have spikes and spiked pitfalls traps so that there is more trap variation and so that I know which areas shouldn’t be accessible  
Given the player in the game  
When the player progresses through the level  
Then the player should encounter spikes and spiked pitfalls that kill the player on contact

-As an user I want to be able to wall jump so that I have access to new traversal methods and so that I can avoid traps in other ways than before.  
Given the player in the game  
When the player has the wall jump ability unlocked and is sticking to a wall and presses the jump button  
Then the player should jump against the wall and be able to continue doing so if he lands on opposing walls

-As an user I want to have access to a second level that is of medium difficulty so that I can learn new features of the game and hone my platforming skills  
Given the user in the Scenes folder  
When the user browses available scenes  
Then he should be able to access the Level 2 scene

-As an user I want to have access to a third level that is of high difficulty so that I can learn all features of the game and master the platforming skills needed for the game  
Given the user in the Scenes folder  
When the user browses available scenes  
Then he should be able to access the Level 3 scene

**Sprint Report**

The goal of this sprint was to finish the task left from the previous sprint (First Level), to finish all gameplay related features and to develop two more levels which make use of the newly implemented features.

All tasks have been completed, except for Levels 2 and 3, which are in progress. Level 2 is under development and Level 3 is finished, but requires adjusting on some of its content. Furthermore, a new trap has been added. Void is a zone tagged as a trap that kills the player on contact. It is used to avoid having the player fall to a lower section of the game and forcing him resume the level from an undesired point.Another thing worth mentioning is that the Arrow Block trap has been changed to shoot spiked balls instead of arrows. Its functionality is the same. A lot of bugfixing has been done this sprint which will reduce resources accorded to it in the following sprint.With the addition of the First Level, the MVP (Minimum Viable Product) is ready.The Software Architecture Report has been updated to include the newly added features.

The following sprint is the last one and it serves the purpose of finishing all incomplete work from this sprints, the two levels, implementing all the menus needed for game navigation, running multiple tests on the game in order to detect and fix bugs, as well as delivering the final version of the product.

**Retrospective Outcome**

Work on the second and third level has revealed that there is a serious need to adjust the difficulty of the levels. Feedback from game-testers has shown that the difficulty of the game is too high for the average gamer. A lot of skill is required from the players in order to complete the levels as they currently are. Features that derive from the Player object generate a lot of bugs. The team has worked hard to fix them, but it is advised that more attention is paid to this element of the game in the testing phase.

**Review Session**

Despite it being the Holiday Season during the sprint’s period, the team has been very commited to working on the project, which has led to impressive progress. The final sprint should provide enough time to fully finish the project and to deliver an outstanding product. With the exception of levels 2 and 3, only the menus of the game are left to be implemented. Everyone has worked a lot to develop the game to its current state, which is very satisfactory.