

# REYKJAVIK UNIVERSITY

## APPENDIX 1

# Sprint Overview

May 14, 2021

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# 1 Sprint 1

We used this first sprint for preparation and to set up the essential software. We set up the Unity game engine, Visual studio IDE and Git to source control. We then got access to the Evolytes management system which gave us access to back-end information for the game. All group members joined a Slack channel for easy communication with the P.O. and other team members. We also set up a Hacknplan board to be able to follow Kanban ideology and so Flow Education could see our progress and prepare the next steps. During this first sprint we also started working on the battle scene and getting familiar with the workspace. We created our first animation by creating a single animation component and then tween using C where we implement in code how the animations should behave and how they should trigger each other.

## 1.1 Sprint 1 Product Backlog

Category	Requirement	Priority	Time	Status
Skeletal animation for Evolytes	Implementation on animations for Lighter Evolyte.	A	21	In Progress
Skeletal animation for Evolytes	Implementation on animations for Bloom Evolyte.	A	8	In Progress
Skeletal animation for Evolytes	Implementation on animations for Bloom Evolyte.	A	3	Done

## 1.2 Sprint 1 Burndown Chart

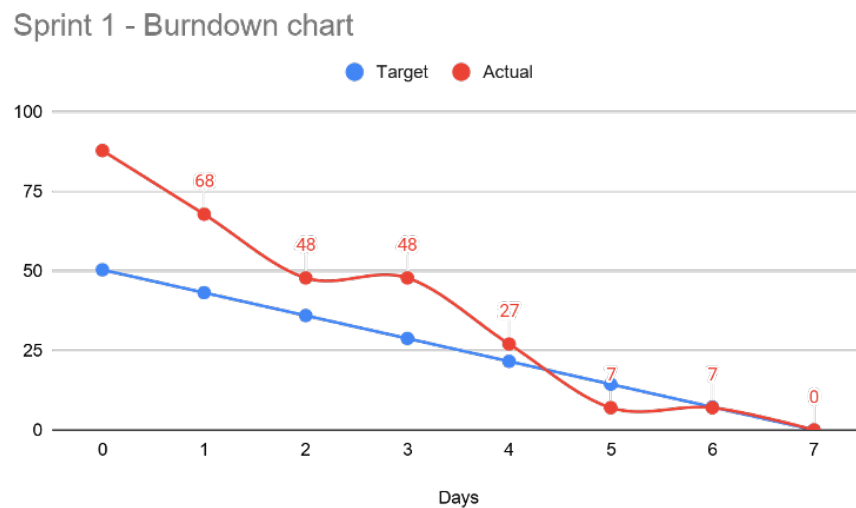


Figure 1: Sprint 1

## 2 Sprint 2

In this second sprint we set goals on what we wanted to achieve for the subsequent week. We tried to make all the ability animations for a certain animal and see how we would progress. We decided to work in pairs due to our previous working arrangement but still contact the other group to resolve conflicts.

### 2.1 Sprint 2 Product Backlog

Category	Requirement	Priority	Time	Status
Skeletal animation for Evolytes	Implementation on animations for Lighter Evolyte.	A	21	Done
Skeletal animation for Evolytes	Implementation on animations for Bloom Evolyte.	A	8	Done
Skeletal animation for Evolytes	Implementation of animations for Fierce Evolyte.	A	5	In Progress
Skeletal animation for Evolytes	Implementation on animations for Kindle Evolyte.	A	5	In Progress

### 2.2 Sprint 2 Retrospective

We saw that the animations varied drastically in difficulty. Some need math equations to calculate different trajectories and angles, while other need more familiarity with tweening in C# to execute. We also decided to postpone abilities that needed states, buffers and abilities that last multiple turns since we wanted to create a good reusable piece of code for all of those instances.

### 2.3 Sprint 2 Burndown Chart

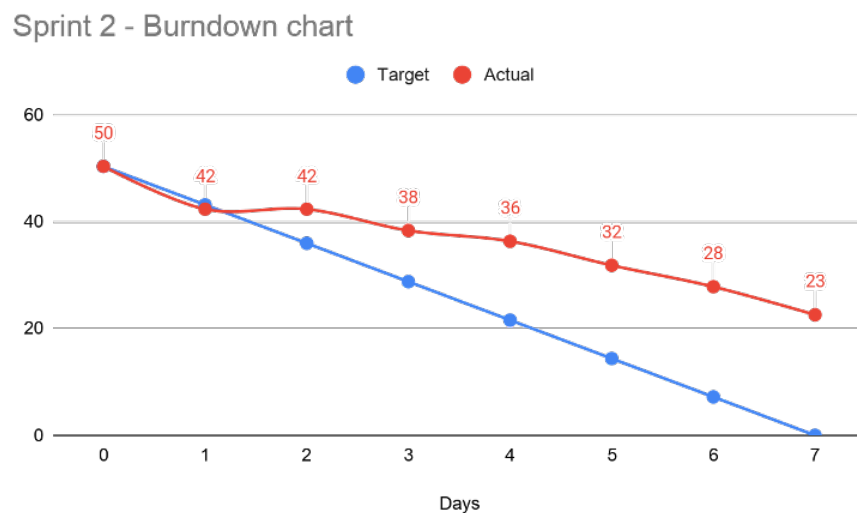


Figure 2: Sprint 2

### 3 Sprint 3

In the third sprint we could really see what we could accomplish in a week since we were more confident in our ability and had a greater scope of what the P.O. and the Q.A. needed and the quality of what they wanted.

#### 3.1 Sprint 3 Product Backlog

Category	Requirement	Priority	Time	Status
Skeletal animation for Evolytes	Implementation on animations for Fieree Evolyte.	A	5	Done
Skeletal animation for Evolytes	Implementation on animations for Leva Evolyte.	A	3	Done
Skeletal animation for Evolytes	Implementation of animations for Kindle Evolyte.	A	5	Testing
Skeletal animation for Evolytes	Implementation on animations for Fyrbat Evolyte.	A	5	Testing
Skeletal animation for Evolytes	Implementation on animations for Cinder Evolyte.	A	5	In Progress
Skeletal animation for Evolytes	Implementation on animations for Spring Evolyte.	A	3	In Progress
Presentation	Setting up a presentation for fellow students	X	X	Done

#### 3.2 Sprint 3 Retrospective

After this sprint we decided to change from 1-week sprints to 2-week sprints, this was an idea our instructor put forward, giving us an easier time managing workload from our other courses and still keeping on target with what we wanted to accomplish that specific week.

#### 3.3 Sprint 3 Burndown Chart

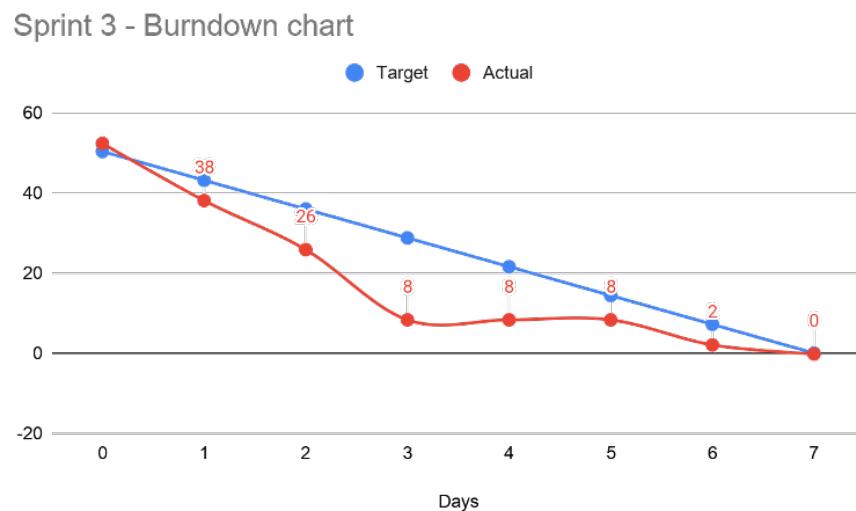


Figure 3: Sprint 3

## 4 Sprint 4

Same as weeks prior we wanted to finish abilities for more animals than before so we could move on from the battle scene sooner because the battle scene was essential for other components of our game to work properly.

### 4.1 Sprint 4 Product Backlog

Category	Requirement	Priority	Time	Status
Skeletal animation for Evelytes	Implementation on animations for Cinder Evelyte.	A	5	Testing
Skeletal animation for Evelytes	Implementation on animations for Badger Evelyte.	A	5	Testing
Skeletal animation for Evelytes	Implementation of animations for Spring Evelyte.	A	3	Testing
Skeletal animation for Evelytes	Implementation on animations for Dart Evelyte.	A	8	In Progress
Skeletal animation for Evelytes	Implementation on animations for Bran Evelyte.	A	5	In Progress
Skeletal animation for Evelytes	Implementation on animations for Kindle Evelyte.	A	5	In Progress
Skeletal animation for Evelytes	Implementation on animations for Fyrbat Evelyte.	A	5	In Progress

### 4.2 Sprint 4 Retrospective

The team worked diligently on progressing the ability animations. However, even though planning was done with other coursework in mind, we still underestimated the workload that we were facing this sprint. For the following sprints we decided to account more for other courses.

### 4.3 Sprint 4 Burndown Chart

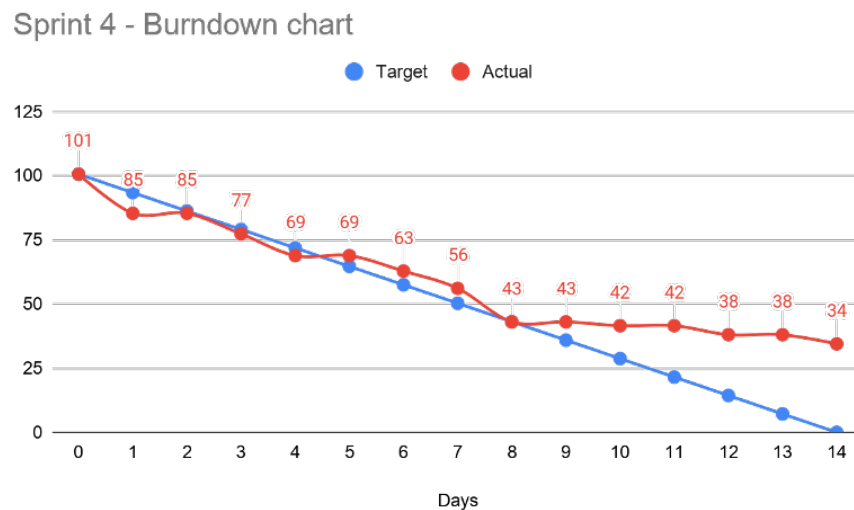


Figure 4: Sprint 4

## 5 Sprint 5

The fifth sprint went similarly to the fourth sprint, we were making more abilities for a greater number of animals in a shorter amount of time and the group decided we needed to switch things up in our next sprint and take on more requirements.

### 5.1 Sprint 5 Product Backlog

Category	Requirement	Priority	Time	Status
Skeletal animation for Evelytes	Implementation on animations for Cinder Evelyte.	A	8	Testing
Skeletal animation for Evelytes	Implementation on animations for Badger Evelyte.	A	5	Testing
Skeletal animation for Evelytes	Implementation of animations for Spring Evelyte.	A	5	Testing
Presentation	Setting up a presentation for the first status meeting.	x	x	Done
Report	Creating a report for first status meeting.	x	x	Done

### 5.2 Sprint 5 Retrospective

We decided to divide and conquer and get some progress done on other tasks that had accumulated. We knew we had to finish all the animals as they are fundamental to gameplay but we also wanted to get a base for the game in its entirety.

### 5.3 Sprint 5 Burndown Chart

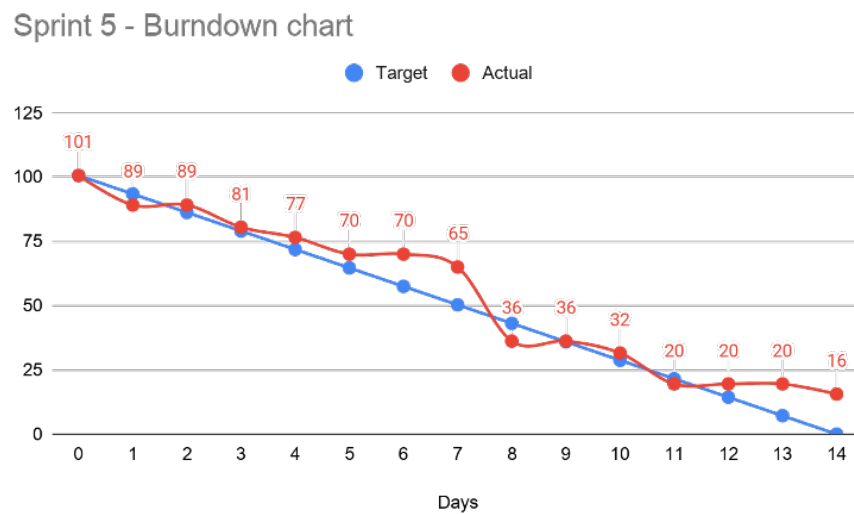


Figure 5: Sprint 5

## 6 Sprint 6

The lion's share of the work went into documentation and presentation design for the first status report. Next steps in the sprint is dividing the project and getting work done on other facets. 2 group members started to work on the UI making it more scalable and creating reusable components for the world map. Another member started to work on the state machine, buffers and abilities that have effects that last for a number of turns. The last member kept making animations and abilities for the animals that were left.

### 6.1 Sprint 6 Product Backlog

Category	Requirement	Priority	Time	Status
Interface / General	Implementation of general code to adjust the size of display to different screen ratios to use in different devices in this project.	A	21	Done
Skeletal animation for Evolytes	Implementation on animations for Fable Evolyte.	A	5	Done
Skeletal animation for Evolytes	Implementation of animations for Kayla Evolyte.	A	5	Done
Skeletal animation for Evolytes	Implementation of animations for Nala Evolyte.	A	5	Done
Skeletal animation for Evolytes	Implementation of animations for Swirly Evolyte.	A	5	Done
Interface / Wait-interface	Wait Interface for in game character. Displays how much time has to pass before being able to accept a quest, battle, reward or opening a chest.	B	21	Done

### 6.2 Sprint 6 Retrospective

After finishing up for the first status meeting, the team went on to work on their own separate tasks. The UI has had some strides as well as the state machine and we are still holding a focus on completing the animations for the animals.

### 6.3 Sprint 6 Burndown Chart

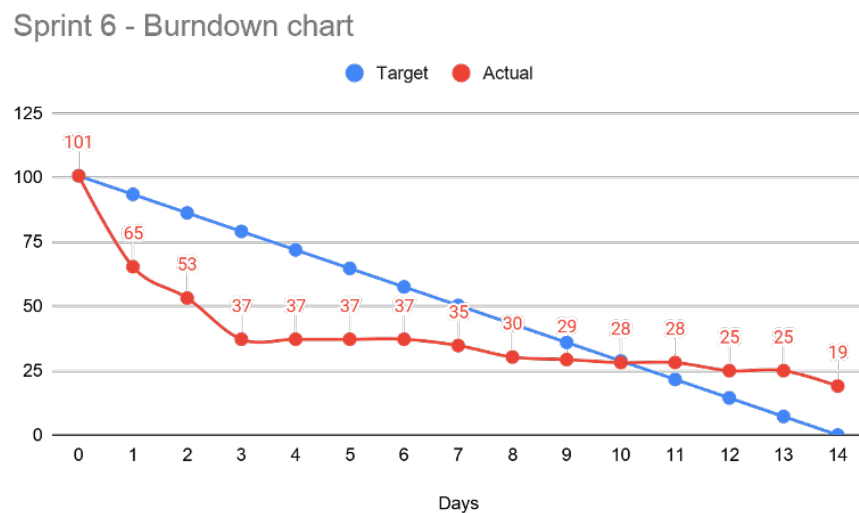


Figure 6: Sprint 6



## 7 Sprint 7

During this sprint a lot of work went into implementing many different UI's, working on scalability for different screen resolutions to enhance the overall game experience and optimising the game for android users as well as apple users. We also started working on round based code for abilities where there are some abilities that last for an x amount of turns. We also completed all the animals except the ones that were state or round based.

### 7.1 Sprint 7 Product Backlog

Category	Requirement	Priority	Time	Status
Battle Interface	Implementation of reusable code for abilities that give an animal a shield which spans over a few turns.	A	8	Done
Battle Interface	Implementation of reusable code for abilities that put opponents to sleep.	A	8	Done
Battle Interface	Update the interfaces for animals that inflicted damage or have used up some energy.	A	5	Done
Skeletal animation for Evelytes	Implementation of animations for Leela Evelyte.	A	5	Done
Skeletal animation for Evelytes	Implementation of animations for Tremor Evelyte.	A	5	Done
Skeletal animation for Evelytes	Implementation of animations for Storm Evelyte.	A	5	Done
Battle Interface	Implementation of reusable code for abilities which span over a few turns and they either help or hurt the animal.	A	3	Done
Interface / Quest Interface from in-game character	Ability to see what reward you will get for finishing quest.	B	5	Done
Interface / Gift Interface from in-game character	Ability to see a reward that a character wants to give player.	C	5	Done
Presentation	Setting up a presentation for second Status Meeting	x	x	Done
Report	Creating a report for second status meeting	x	x	Done

### 7.2 Sprint 7 Retrospective

This sprint did go very well and we built a great foundation for us to work more on in the following weeks. We finished all the animals that were not state or buff dependent but one so we are well on our way. We are all still all working on separate assignments but all group members are eager to help one another.

### 7.3 Sprint 7 Burndown Chart

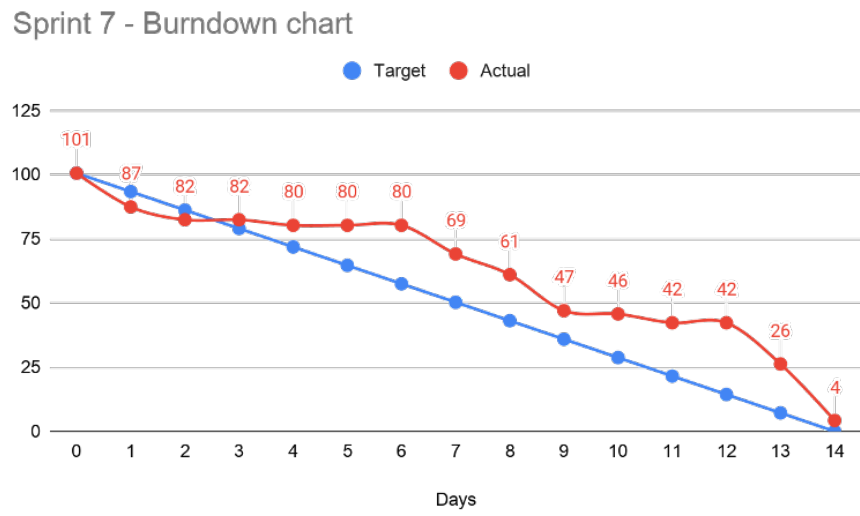


Figure 7: Sprint 7

## 8 Sprint 8

During this sprint we started on animations that were round and damage based where we made three different types of animation and changed their state, so we had a start state a repeat state that was supposed to repeat until it had taken too much damage or the rounds were over then it went into the finished state. UI's kept up a good pace but canvas unity configurations had problems with the canvas resize manager.

### 8.1 Sprint 8 Product Backlog

Category	Requirement	Priority	Time	Status
Battle Interface	Implementations of multiple abilities which have multiple effects on the animals strength, life and energy	A	13	Done
Interface / Interface after victory	Screenshot that shows the victorious results and overview.	A	5	Done
Interface / Interface after victory	Screenshot that shows the results of the loss and an overview.	A	5	Done
Skeletal animation for Evolytes	Implementation of animations for Stampy Evolyte.	A	5	Done
Skeletal animation for Evolytes	Implementation of animations for Slender Evolyte.	A	5	Done
Interface / Bag	Show a description of an item within the bag.	A	3	Done
Interface / Login	Ability to type in email address and password and a button to log in.	A	3	Done
Interface / User information	Button to switch user and log out.	A	3	Done
Interface / Bag	Implementation of 5 different types of filters so you can filter by object type	C	8	Done
Interface / Battle Interface from in-game character	Ability to "Accept" or "Decline" battle.	A	3	Testing
Interface / User information	Ability to change the music and sound in the game.	A	5	In Progress
Battle interface	Ability to run away during battle.	A	3	In Progress

### 8.2 Sprint 8 Retrospective

This sprint did go well but not as well as expected since the things we were working on were time consuming and more work than we thought at first. Every member was doing their own work and even though things were happening more slowly than expected we were still going forward which was a good sign.

### 8.3 Sprint 8 Burndown Chart

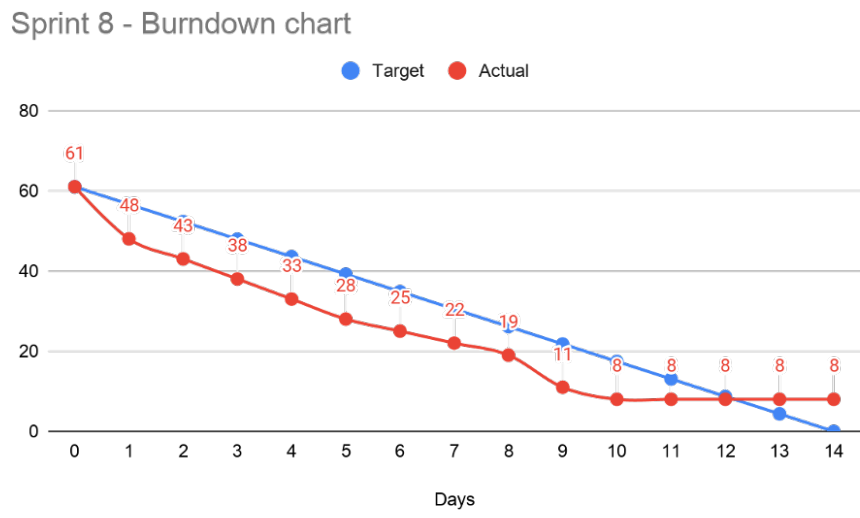


Figure 8: Sprint 8

## 9 Sprint 9

This sprint did go well and we finished all the animations that needed different states. UI's were well along on their way and we started to connect to them together. Changing the resolution depending on different screen sizes was not working as intended so that way was scrapped and we created a new way to implement that method which was finished the same week. The code was still kept for the company to use later on as that was something they were really interested in keeping but saw that it was way too time consuming.

### 9.1 Sprint 9 Product Backlog

Category	Requirement	Priority	Time	Status
Interface / Bag	Ability to use an item within the bag.	A	13	Done
Interface / Animals Overview	The ability to select an animal to get further information.	A	8	Done
Interface / Quest Interface from in-game character	Ability to see what items character wants.	A	8	Done
Interface / Quest Interface from in-game character	Ability to see if player has all items to finish a quest.	A	5	Done
Interface / Receiving gift	Overview of what you receive for winning a battle.	A	5	Done
Interface / Select student	User has the ability to see all characters accounts on that email.	A	5	Done
Running game	Controller that verifies if user has a valid log in and shifts interface accordingly.	A	5	Done
Interface / Animals Overview	Player sees the animals he has on hand.	A	3	Done
Battle Interface	Implementation of the use of food in the battle interface.	A	13	Testing
Interface / When animal is captured	Screenshot with a image of the animal just caught.	A	3	Testing

### 9.2 Sprint 9 Retrospective

Other than the resize component the sprint went very well. Although not being a great way to finish the resolution changer, it taught us to stop putting extra effort into a task that was taking too much time compared to what we would get out of them being completed.

### 9.3 Sprint 9 Burndown Chart

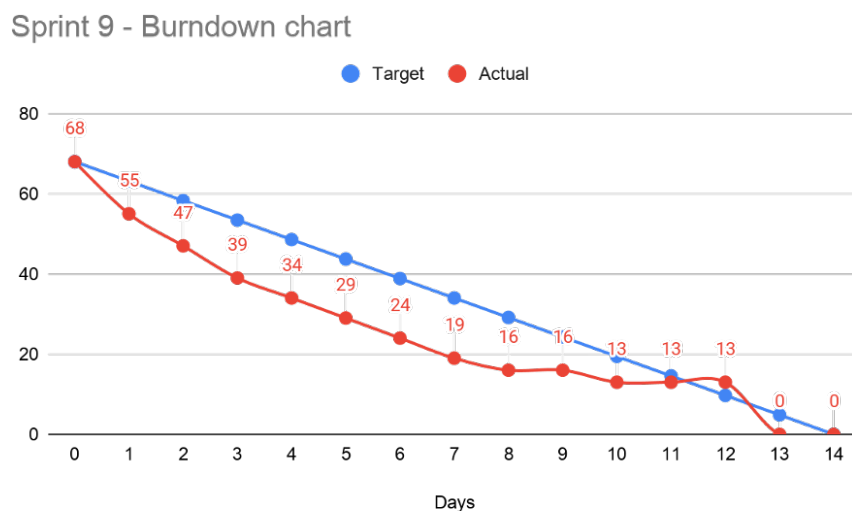


Figure 9: Sprint 9

## 10 Sprint 10

This sprint went really well. All of us had finished our exams and final projects in other classes and we were working for at least 8 hours a day at Snorri's apartment. Working together in one place really sped things up and the hours we were putting in were really starting to show. The game was finally starting to look presentable.

### 10.1 Sprint 10 Product Backlog

Category	Requirement	Priority	Time	Status
Communication with back-end	Implementation of general end points after demand to communicate with the back-end.	A	21	Done
Interface / Bag	Select a monster to use an item on	A	8	Done
Environment	Implementation of a component that can hide and appear according to what quests player has finished.	A	8	Done
Environment	Implementation of a component so player can interact with an item	A	5	Done
Environment	Implementation of a component that allows player to press on an item or person in the environment according to their distance	A	3	Done
Interface / Animal details/ Abilities	Ability to see and upgrade an animals ability if the animal has gained enough XP. To upgrade an ability we use an "ability token" which you need to collect and then spend for a desired trick.	A	8	Testing
Battle interface	Implementation of the use of crystals to capture other animals in the battle interface with the corresponding interfaces.	A	5	Testing
Battle Interface / Using bag items	Implementation of a screenshot with an animation that implies what the effect of the item is and updates animal accordingly.	A	5	Testing
Interface / Crystal selected	Player sees the animals he has on hand and what animals he has to put into his lineup. We want to update this view and make it easier to navigate and use.	A	21	In Progress
Interface/Bag	Implement a slider for when the bag has more items than it is able to show in one screen	C	13	Trashed

### 10.2 Sprint 10 Retrospective

Being together in one place instead of being remote helped us better understand what needed to be done and helped us visualize the final project we wanted to finish. We were better coordinated and we could easily help each other out much faster. Being in person is what made this sprint go well.

### 10.3 Sprint 10 Burndown Chart

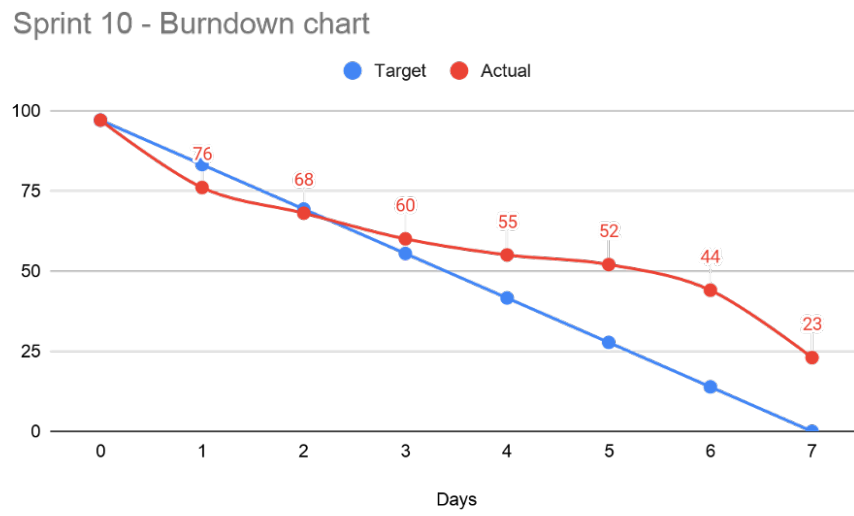


Figure 10: Sprint 10

## 11 Sprint 11

During this sprint we were finishing the rest of the A requirements and a lot of the B requirements. We saw how drastically our workflow changed when we could spend all our time and effort into one project. In total this sprint was a really successful one and we were right on schedule to finish on time and we were seeing the end of this assignment.

### 11.1 Sprint 11 Product Backlog

Category	Requirement	Priority	Time	Status
Communication with back-end	Implementation of a communication layer at fitting positions in game.	A	21	Done
Interface / Crystal selected	Player sees the animals he has on hand and what animals he has to put into his lineup. We want to update this view and make it easier to navigate and use.	A	21	Done
Running game	Controller that gets data about the player when the software has gone through running in the background.	A	8	Done
Running game	Controller that loads in environment accordingly.	A	5	Done
Interface / Upgrading an abilities	Screenshot that displays that player has got a new ability.	B	13	Done
Interface / Battle interface from in-game character	Ability to display animal that in game character will use in battle against player.	C	3	Done
Other	Implementation of error handling screens.	A	13	Testing
Interface / Details about abilities	The ability to see a abilities properties for a particular animal.	B	13	Planned
Interface/ Animal details/ Animal evolution	Display of different evolutionary branches according to the selected animals.	B	8	Planned

### 11.2 Sprint 11 Retrospective

This sprint went very well, connecting all the scenes together was harder than we thought at first glance. We were not able to finish connecting all of them but most of them were completed so we show how the game runs.

### 11.3 Sprint 11 Burndown Chart

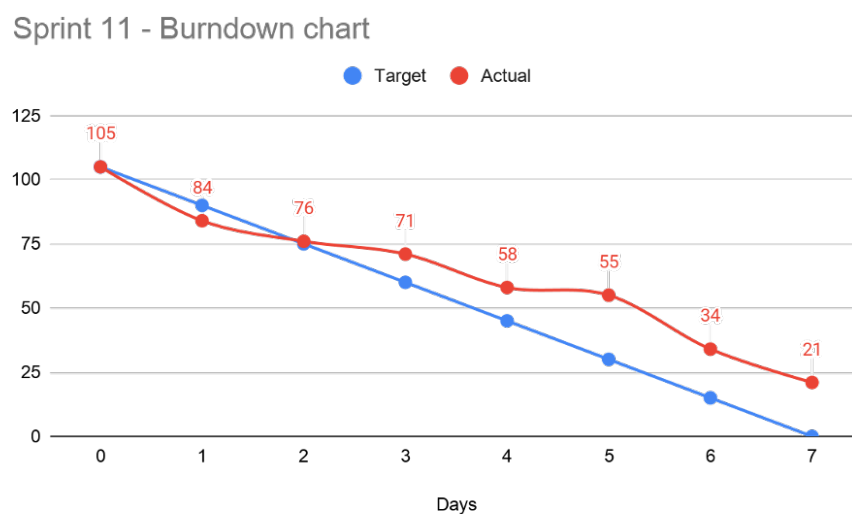


Figure 11: Sprint 11



## 12 Sprint 12

During this final sprint we spent a lot of time finishing our final report, creating the user manual and the operating manual. We also spent a great deal of time fixing bugs and finishing up some requirements in our b category that were not too time consuming. We were almost done so team members were eager to finish. Although we were unable to finish the requirements we set for our selves in this sprint, we were still very happy with our end result.

### 12.1 Sprint 12 Product Backlog

Category	Requirement	Priority	Time	Status
Interface / Animal Evolution	Ability to select to not evolve animal.	C	8	Done
Environment	Implementation of a component that starts animations when called when player is within some radius.	C	5	Done
Interface / Animal Evolution	Ability to select and deselect an animal.	C	3	Done
Interface / Battle Interface from in-game character	Ability to see rewards for defeat in game character.	C	3	Done
Interface / Comic book interface	General Interface that takes in information about what comic strip to display.	B	8	Planned
Environment	Implementation of a component that changes its colliders so that character can cross over and go under a bridge or other similar items.	B	5	Planned
Other	Implementation of a loading screen, which shows the user the progress of the data being loaded in.	B	5	Planned
Character driven storytelling in game	Implementation of multiple abilities while using skinning on animals.	C	21	Planned
Character driven storytelling in game	Implementation of different scenes that tell the games plot.	C	21	Planned
Animation Skinning	Implementation of skinning controllers on animals.	C	13	Planned
Character driven storytelling in game	Implementation of components that initiate a scene according to determined conditions that move the story forward.	C	13	Planned
Character driven storytelling in game	Implementation of the environment and back-end communication that indicate the forward progress of the player.	C	13	Planned
Animation Skinning	Implementation of various loading for skeletal animation in regards to skinning.	C	8	Planned
Environment	Implementation of a component that displays a circle under that item which the component is connected to. This would indicate if an item is threatening or not.	C	8	Planned
Environment	Implementation of speech bubbles with an image when player is with in some radius.	C	8	Planned
Interface / Chest Interface	Chest Interface that displays when clicked.	C	8	Planned
Environment	Implementation of a component which would display or hide items in world according to animal level.	C	5	Planned
Environment	Implementation of a component that displays or hides an item in the game world which the component is connected to in regards to how many animals the player has. This is used to limit the area for players that have at least 2-3 animals on hand.	C	5	Planned

Category	Requirement	Priority	Time	Status
Animation Skinning	Implementation of various abilities in regards to skinning.	C	3	Planned
Interface / Chest Interface	The ability to choose to open a chest.	C	3	Planned

## 12.2 Sprint retrospective

This sprint started off a bit slow since team members were a bit sleep deprived, but since time was of the essence the team really sped things up and all team members put in extra hours so we could finish on time. This was a perfect ending for our final sprint since everything we had been working on for the past 15 weeks was finally coming together.

## 12.3 Sprint 12 Burndown Chart

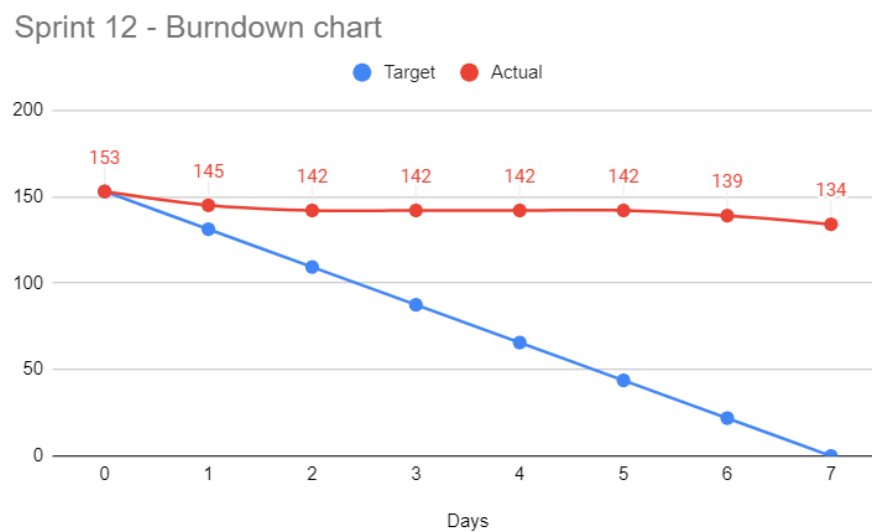


Figure 12: Sprint 12