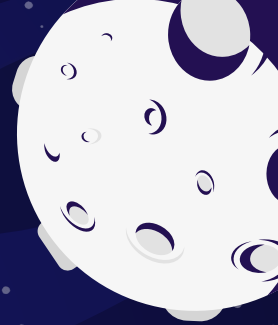


# NNEOPSAAP!

Programming fundamentals 1 project



# THE REPORT ITSELF

June '18

National Science & Technology  
Council



## NATIONAL NEAR-EARTH OBJECT PREPAREDNESS STRATEGY AND ACTION PLAN

*A Report by the*  
INTERAGENCY WORKING GROUP FOR DETECTING AND MITIGATING  
THE IMPACT OF EARTH-BOUND NEAR-EARTH OBJECTS

*of the*  
NATIONAL SCIENCE & TECHNOLOGY COUNCIL

JUNE 2018



"Implementing the National Near-Earth Object Preparedness Strategy and Action Plan will greatly increase our nation's readiness and work with international partners to respond effectively, should a new potential asteroid impact be detected"

-LINDLEY JOHNSON, NASA'S PLANETARY DEFENCE OFFICER SAID IN A STATEMENT.

## our team



MAK FAZLIC



DANIELA GJORGJIEVA



ALBERT CERFEDA



NTWALI MUHIZI

# ORGANIZATION



“For every minute spent in organising an hour is earned” - Benjamin Franklin

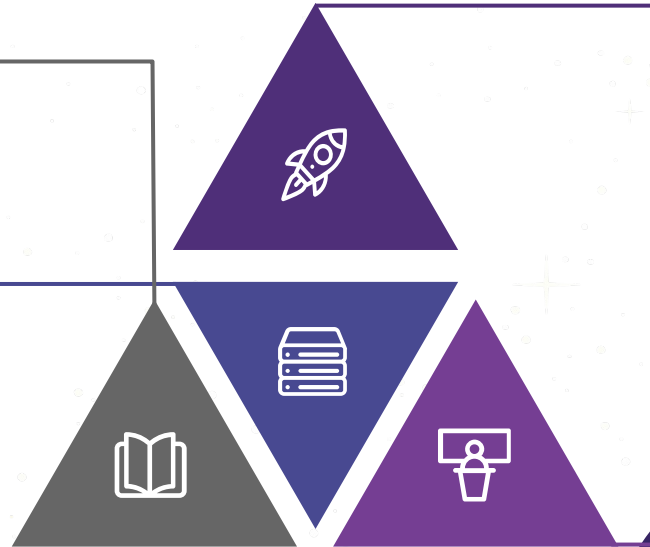
# STRUCTURE

## DOCUMENTATION

Documenting the project was fairly easy as we noted down our development. It was around **10%** of the engagement

## LEADERBOARD

Leaderboard software was one of the more important parts of the presentation as well accounting for **35%** of our engagement.



## GAME

Creating the game was the most substantial part of the project and accounted for around **50%** of our engagement

## PRESENTATION

Presentation was the final milestone and contributed to the last **5%** of our engagement.

# DISTRIBUTION OF LABOUR

	MAK FAZLIC	DANIELA GJORGJIEVA	ALBERT CERFEDA	NTWALI MUHIZI
MAIN MENU				
GAME LOGIC				
LEADERBOARD				
DOCUMENTATION & PRESENTATION				



Designed



Double-checked



Suggest ideas

GAME







# #DEMO

Bugs during Testing:

Bugs five minutes before demo:



SPRITE%

PLAYER%

ASTEROID%

BULLET%

## CLASS STRUCTURE!

### SPRITE%

A superclass that contains basic properties of every element displayed

### ASTEROID%

Identifies a falling asteroid that causes damage to the player and disappears on bullet collision.

### PLAYER%

Identifies a player and implements features like shooting, healing and scoring.

### BULLET%

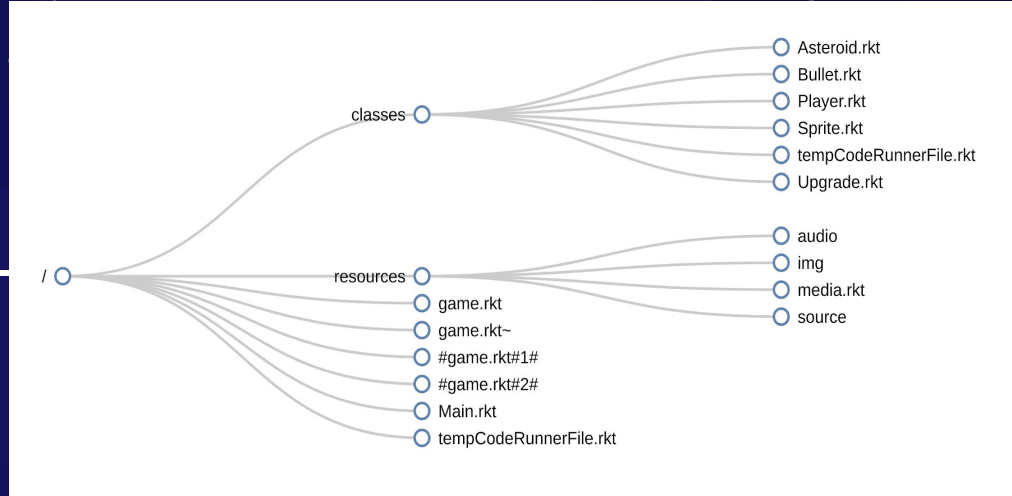
Gets exerted by the player and produces a scoring effect on asteroid collision.



# CLASSES AND FILES

## “IMPROVEMENTS”

To make the code more efficient and maintainable we implemented classes and subdivided the code into several units.



The background is a dark blue space-themed illustration. It features several white stars of varying sizes, some of which are part of larger star clusters or galaxies. There are also several pink celestial bodies: a crescent moon in the upper right and a planet with a ring in the lower left. Diagonal streaks of light, resembling meteors or distant galaxies, cross the scene. The overall aesthetic is clean and modern, with a focus on geometric shapes and a limited color palette of blues, pinks, and whites.

# ~2500 TO 1,698

Decrease in lines of racket code due to optimisation

# LEADERBOARD





## DESKTOP RACKET COMPILER

Once a user executes the game on his local desktop computer and completes the gaming experience he will be greeted with a leaderboard.

**Your Run**

# RANKING	PLAYER NAME	★ SCORE	♥ LIVES	🕒 TIME-DATE
1	Mak	4500	20	17:01:54 11/12/2020

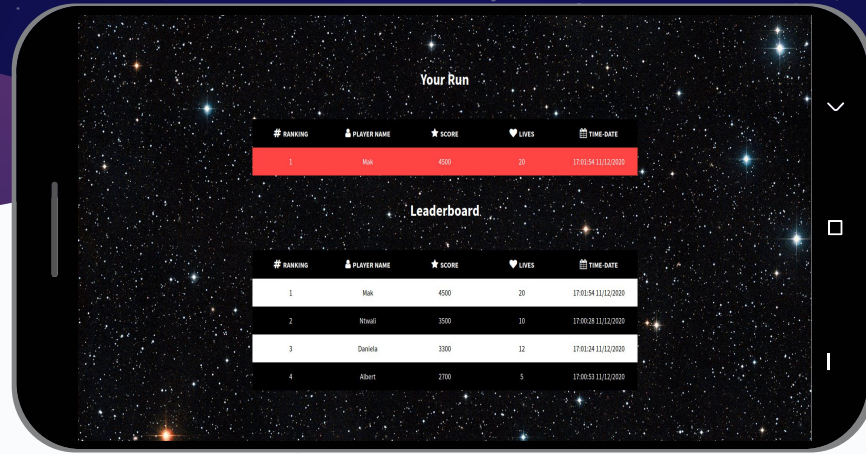
**Leaderboard**

# RANKING	PLAYER NAME	★ SCORE	♥ LIVES	🕒 TIME-DATE
1	Mak	4500	20	17:01:54 11/12/2020
2	Ntwali	3500	10	17:00:28 11/12/2020
3	Daniela	3300	12	17:01:24 11/12/2020
4	Albert	2700	5	17:00:53 11/12/2020

## TABLET WEB APPLICATION

The leaderboard has fields such as ranking, name, score, lives and the time and date of the game completion.





## MOBILE WEB APPLICATION

The leaderboard has fields such as ranking, name, score, lives and the time and date of the game completion.

## IMPROVEMENTS



**CROSS COMPATIBILITY**



**PATCHING THE BUGS**



**USER EXPERIENCE**



**THANKS!**

