

# The Rolling Stones

*present*

## VIKINGS



Presented by:  
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# Agenda

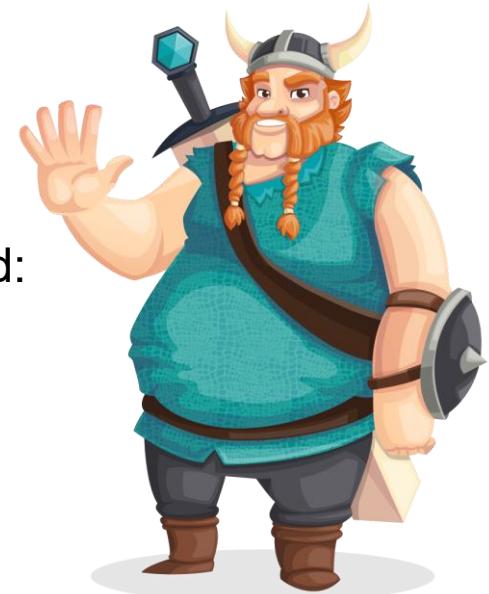
- Objective & Game Overview
- How the game was modeled with Classes
- Key design choices (inheritance)
- Group Dynamic, Challenges & lessons learned

# Objective & Game Overview

- Build a turn-based war simulation
- Make all predefined tests pass
- Practice Object-Oriented Programming

But Also...

- Combine and apply all Python fundamentals learned:
  - Defining variables & attributes
  - Python syntax
  - for loops & conditionals
  - Using built-in methods (`len()`, `append()`, `remove()`)
  - Reading & understanding error messages



# Classes conception



## Soldier

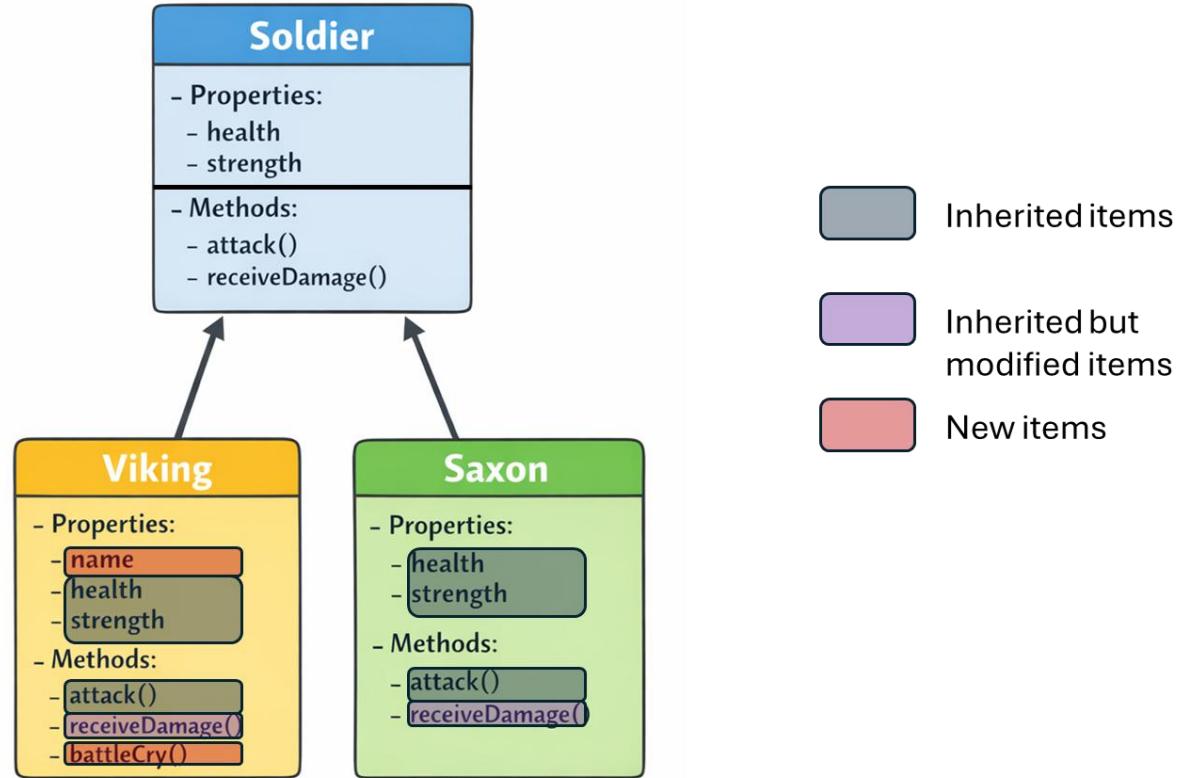
- Properties:
  - health
  - strength
- Methods:
  - attack()
  - receiveDamage()

## War

- Properties:
  - vikingArmy (list)
  - saxonArmy (list)
- Methods:
  - addViking()
  - addSaxon()
  - vikingAttack()
  - saxonAttack()
  - showStatus()



# Soldier class



# War class

## War

- Properties:
  - vikingArmy (list)
  - saxonArmy (list)

- Methods:
  - addViking()
  - addSaxon()
  - vikingAttack()
  - saxonAttack()
  - showStatus()



## Dynamic of the group

- Eya has more knowledge about Python and she led but didn't spoil the solution
- Together we spotted the errors and failures of each person to make the tests run correctly

## Lessons learned

- viking Attack & saxon Attack:
  - receive damage before removing death soldiers
- Managing Errors & Failures
- Class War and Class Soldier are not related on the statement of the classes but after in the actual game the code relate them

# Demo

```
python3.11.exe c:/Users/Alex/Documents/Ironhack/Week1/mini-project-vik:  
round: 1 // Viking army: 4 warriors and Saxon army: 4 warriors  
Vikings and Saxons are still in the thick of battle.  
round: 2 // Viking army: 4 warriors and Saxon army: 3 warriors  
Vikings and Saxons are still in the thick of battle.  
round: 3 // Viking army: 3 warriors and Saxon army: 3 warriors  
Vikings and Saxons are still in the thick of battle.  
round: 4 // Viking army: 3 warriors and Saxon army: 3 warriors  
Vikings and Saxons are still in the thick of battle.  
round: 5 // Viking army: 2 warriors and Saxon army: 3 warriors  
Vikings and Saxons are still in the thick of battle.  
round: 6 // Viking army: 1 warriors and Saxon army: 3 warriors  
Vikings and Saxons are still in the thick of battle.  
round: 7 // Viking army: 0 warriors and Saxon army: 3 warriors  
Saxons have fought for their lives and survive another day...  
PS C:\Users\Alex\Documents\Ironhack\Week1\mini-project-vikings-en> █
```

# Thanks!

