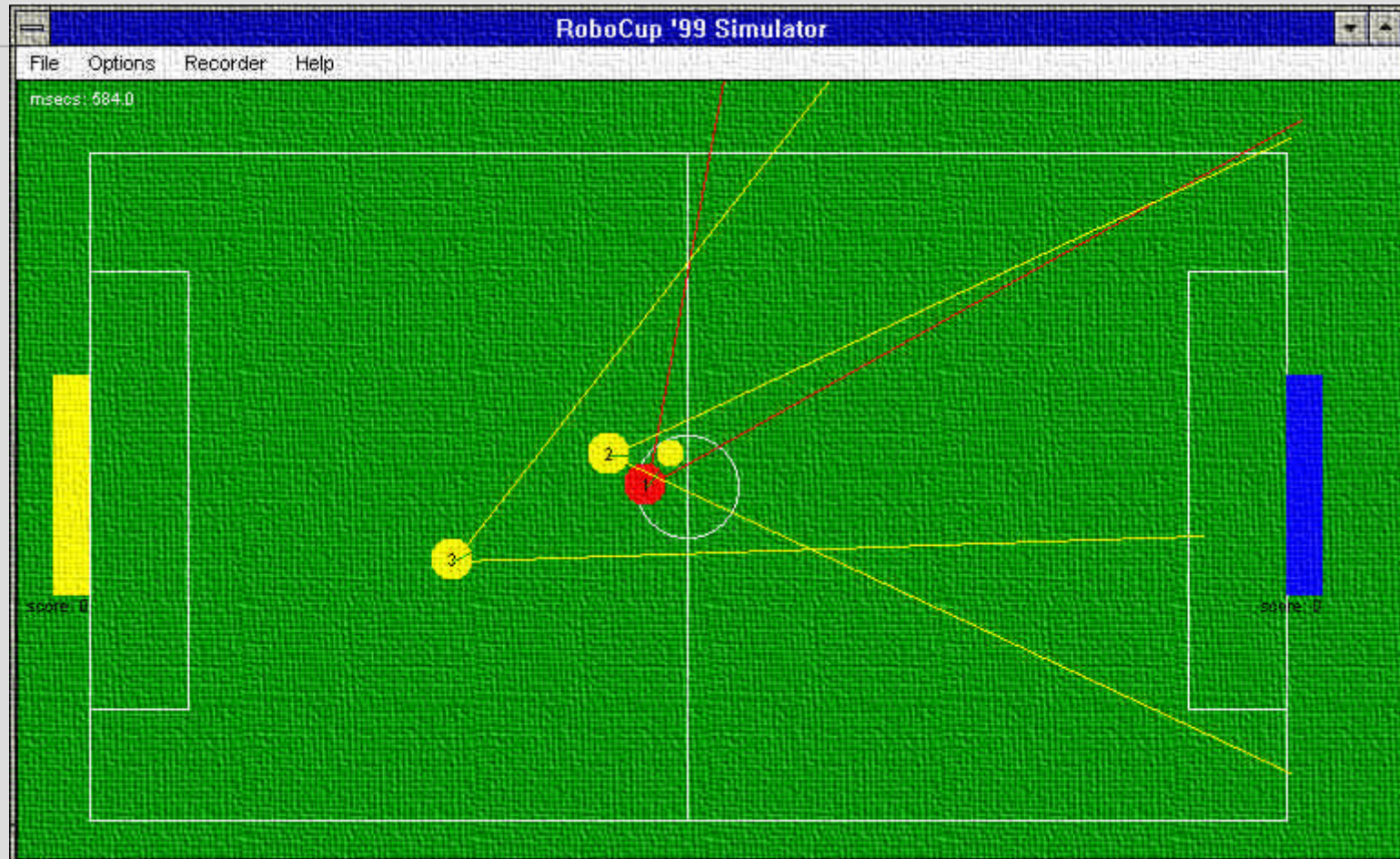


RoboCup '99 Simulator



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Presentation Outline



- Introduction
- Motivation for the project
- The Simulator
- Demonstration
- Inside Look
- Conclusion
- Question & Answers

Motivation



ACCELERATE SOFTWARE DEVELOPMENT

- Remove initial dependency on hardware
- Allow parallel development with hardware
- Substantially reduce testing time
- Reduce setup/maintenance time
- Remove testing costs



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Motivation



REGRESSION TESTING

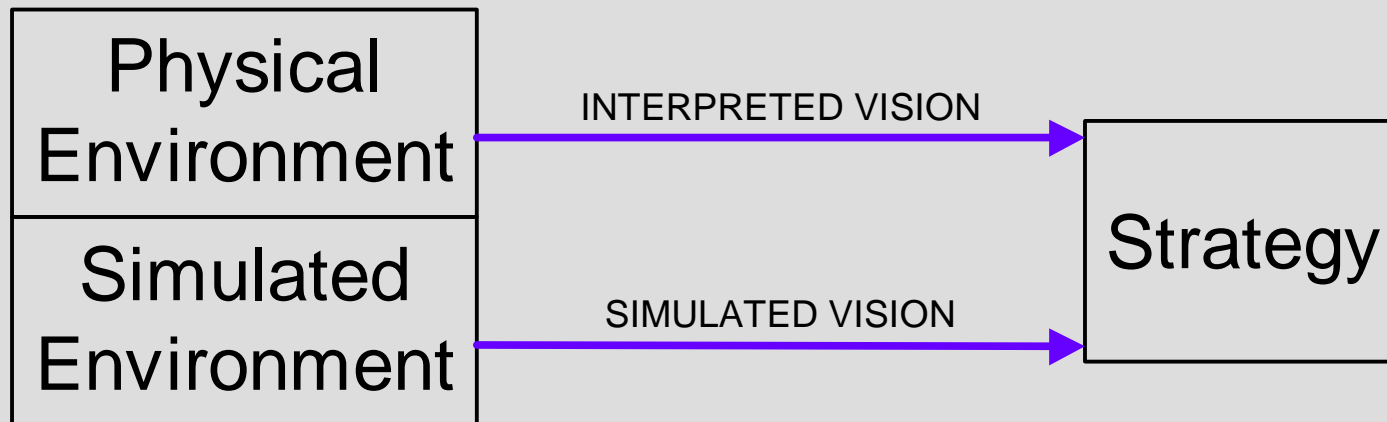
- Intensive testing for reliability
- Scenario testing
- Batch mode testing
- Event Logging
- Scenario recreation from logs



Motivation

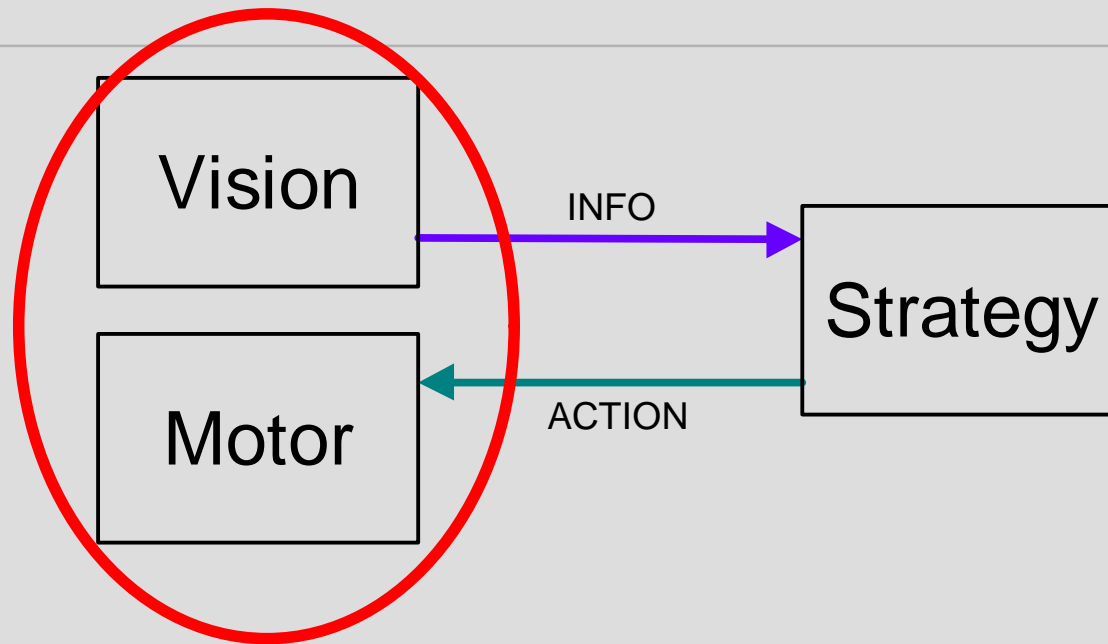


ENVIRONMENT CONTROL

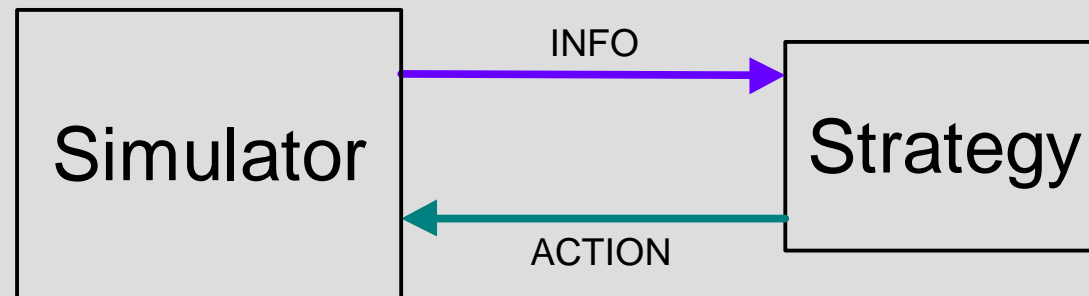


- Isolate the behavioural domain
- Have control over physical variables
- Develop environmentally stable behaviours

The Simulator

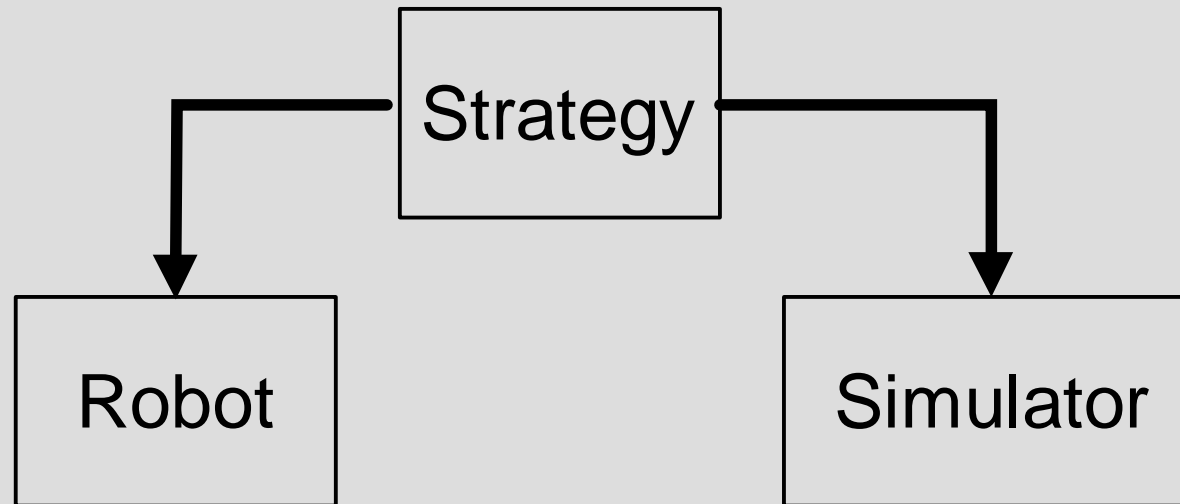


The Simulator



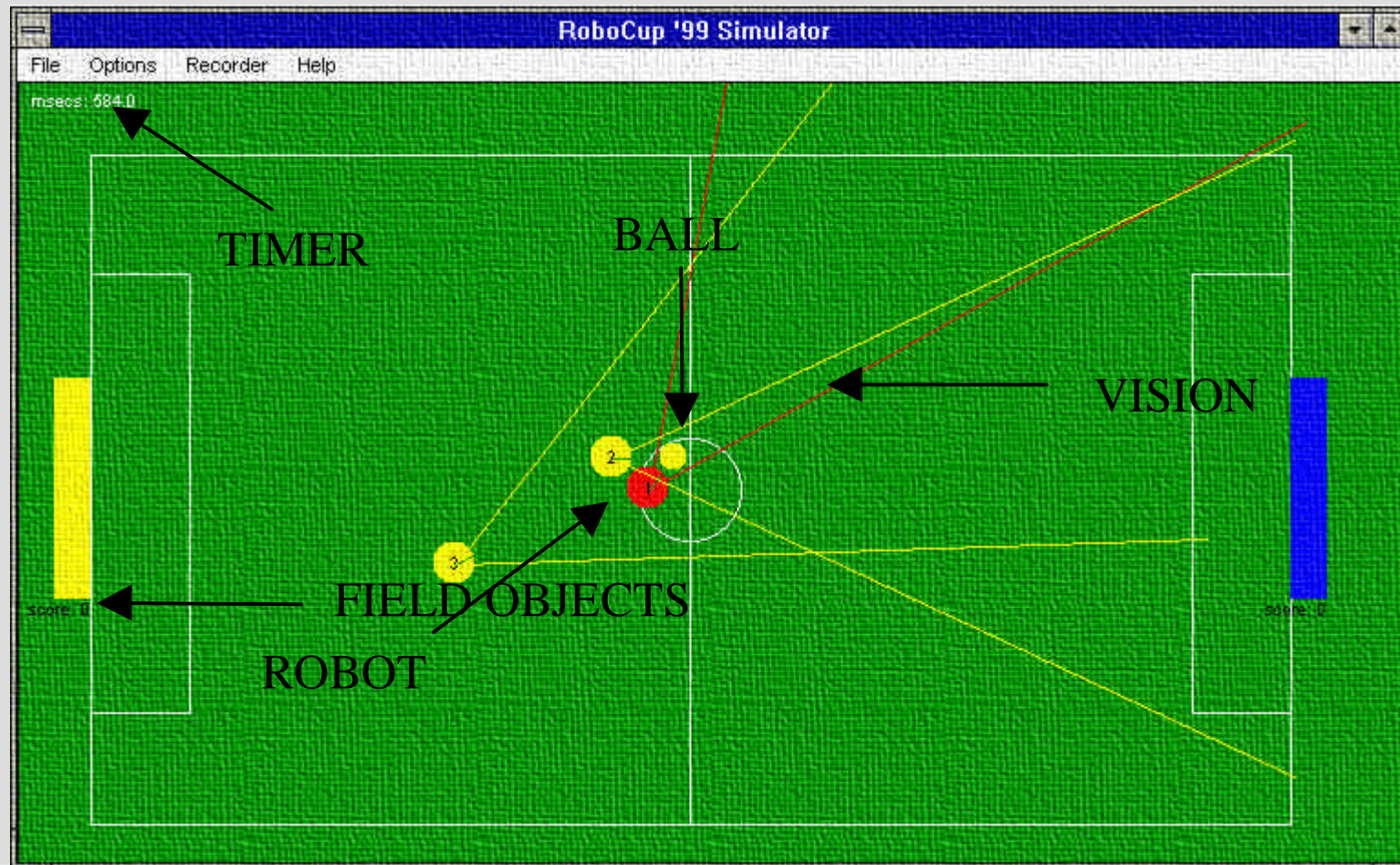
- For testing gameplaying behaviours
- Provides an initial test stage
- Simple physical world model
- Simple robot model

The Simulator



- Build strategy as a plugin
- Minimal overhead to existing strategy
- Multiple strategies

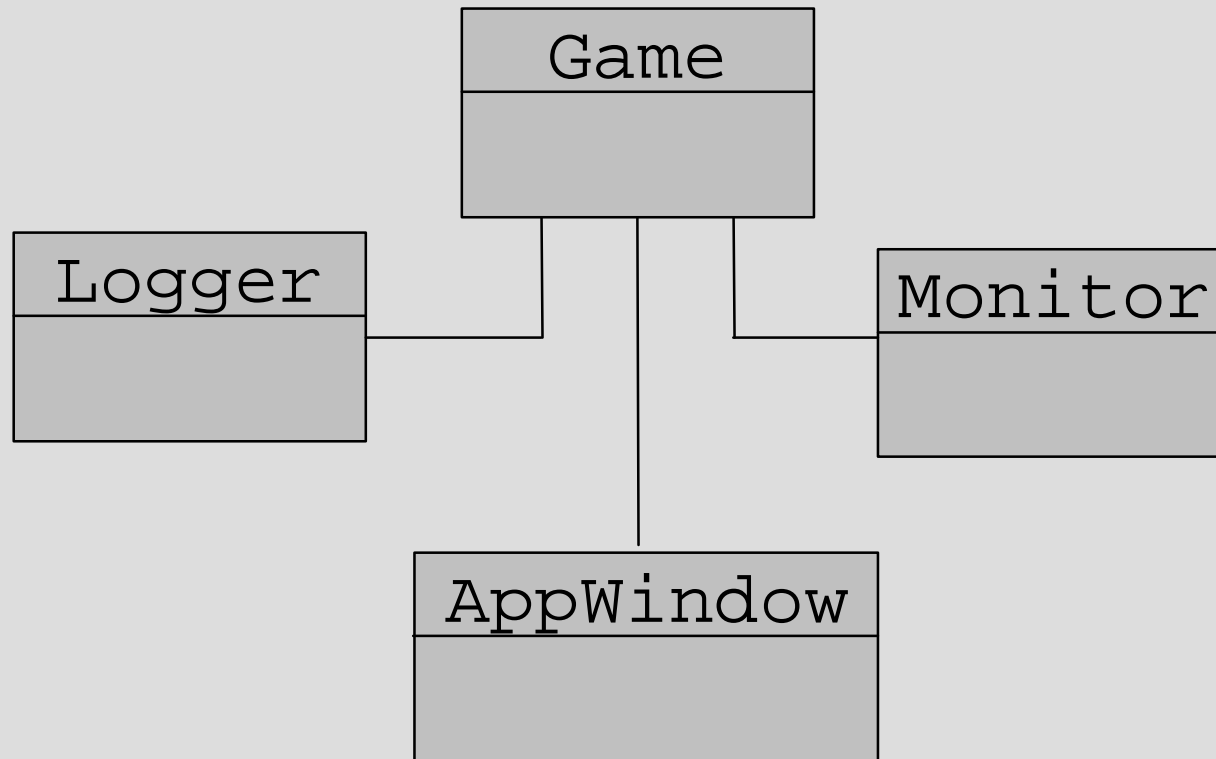
The Simulator



Demonstration

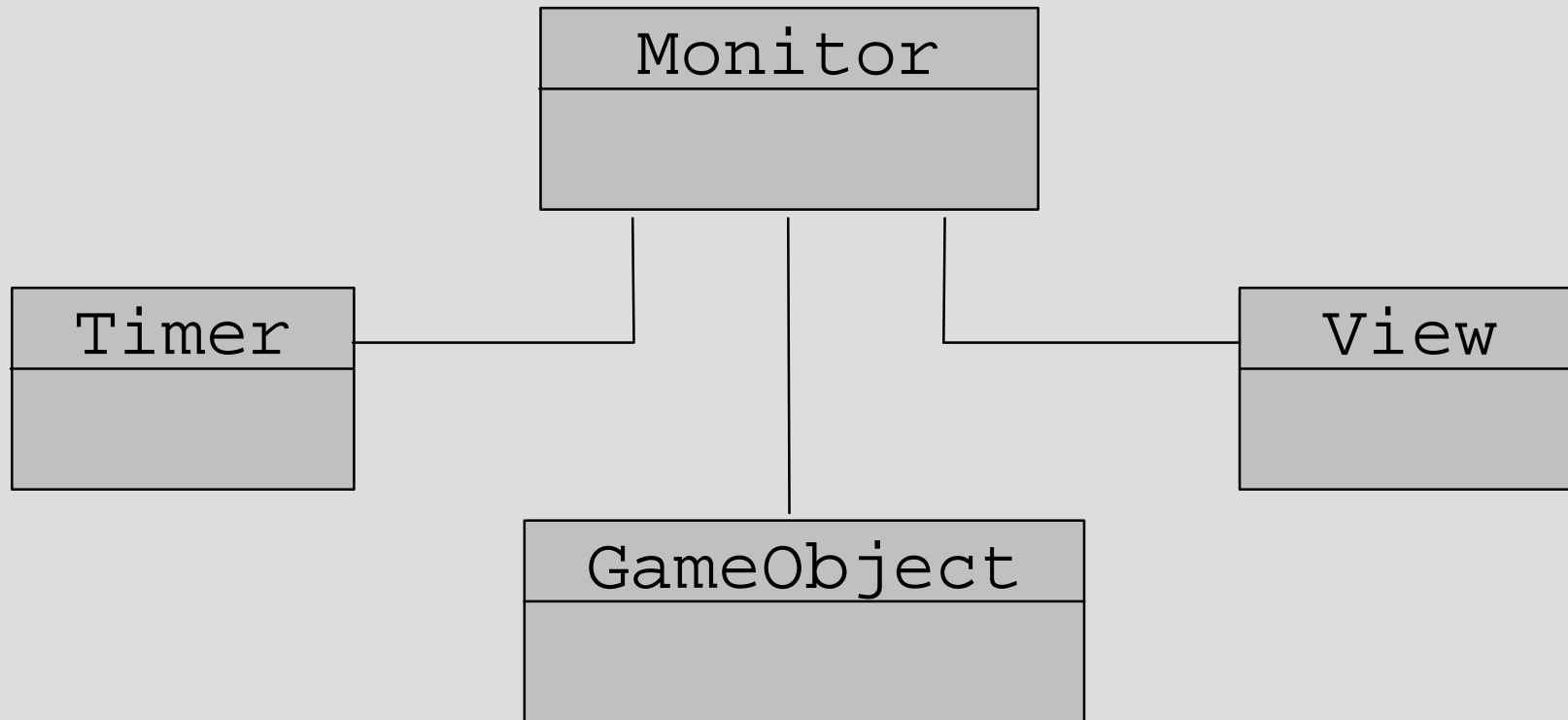


Inside Look



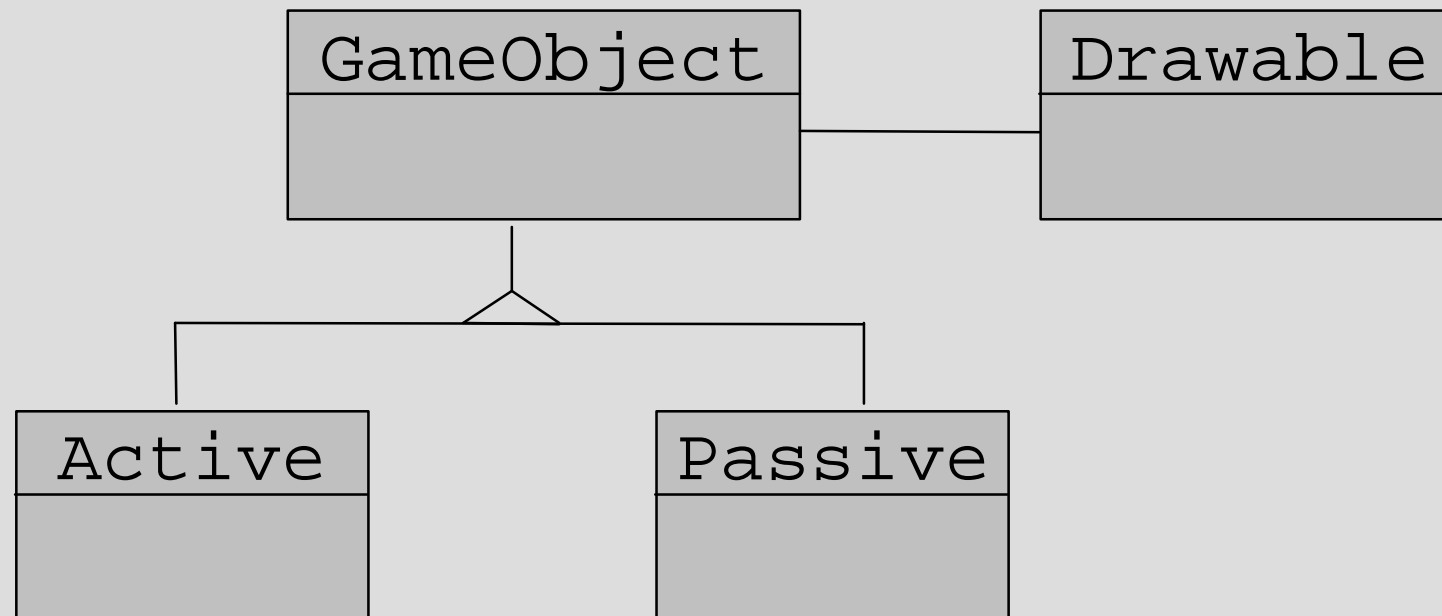
- The Structure

Inside Look



- The Structure

Inside Look



- The Structure

In The End



- Current status
 - Thoroughly testing basic behaviours
 - Logging of important scenarios
- Future directions
 - Incorporate broadcasting
 - Interface for multiple strategies
- Summary

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