

# TDT4240 - Excerise 2

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## 1 Introduction

3.a) For the patterns listing in Step3, which are architectural patterns and which are design patterns? What are the relationships and differences of architectural patterns and design patterns?

Observer	2 Design Pattern
State	Design Pattern
Template Method	Design Pattern
MVC	Architectural pattern
Abstract Factory	Design Pattern
Pipe and Filter	Deisgn Pattern

3.b) How is the pattern you chose realized in your code? (Which class(es) works as the pattern you chose?)  
We chose to implement the MVC-pattern in our assignment. In our implementation, the `ıVÅR KLASSE!;AnimateSprite`-class works as the model, and the `ıVÅR KLASSE!;GameScreen` works as the View- Controller. Whenever the controller (the `ıVÅR KLASSE!;TouchListener`) recieves a `ıVÅR EVENT!;TouchEvent` and needs to move the sprite, it's call the `setPosition`-method of the `ıVÅR SPRITE!;AnimatedSprite`. The `ıVÅR SPRITE!;AnimatedSprite` class then sends a `ıVÅR SPRITE!;ChangeEvent` to notify any classes listening to the model. This event is recieved in the `ıVÅR SPRITE!;GameScreen` class, which then updates the textbox showing the position of the helicopter.

3.c) Is there any advantages in using this pattern in this program? (What are the advantages/disadvantages?)

An advantage of using the MVC-pattern is that the `setLabel`-method is only run at changes in the X- and Y-coordinates.