Module 11:
"Façade"

TEKNOLOGISK
INSTITUT

Agenda

- Introductory Example: Long Walks
- Challenges
- Implementing the Façade Pattern
- Pattern: Façade
- Overview of Façade Pattern
- A Slight Word of Warning

Introductory Example: Long Walks

```
IBluetoothSettings bluetooth = settingsManager.Bluetooth;
bluetooth.IsEnabled = false;
string trackerAppName = "Exomondo";
applicationController.Start(trackerAppName);
...
applicationController.Stop(trackerAppName);
bluetooth.IsEnabled = true;
```

```
interface ISettingsManager
{
    IBluetoothSettings Bluetooth { get; }
}
```

```
interface IApplicationController
{
    bool Start( string name );
    void Stop( string name );
}
```

Challenges

- Do we really have to go through that every time?
- Does every client need to figure out the logic of all the subsystems?

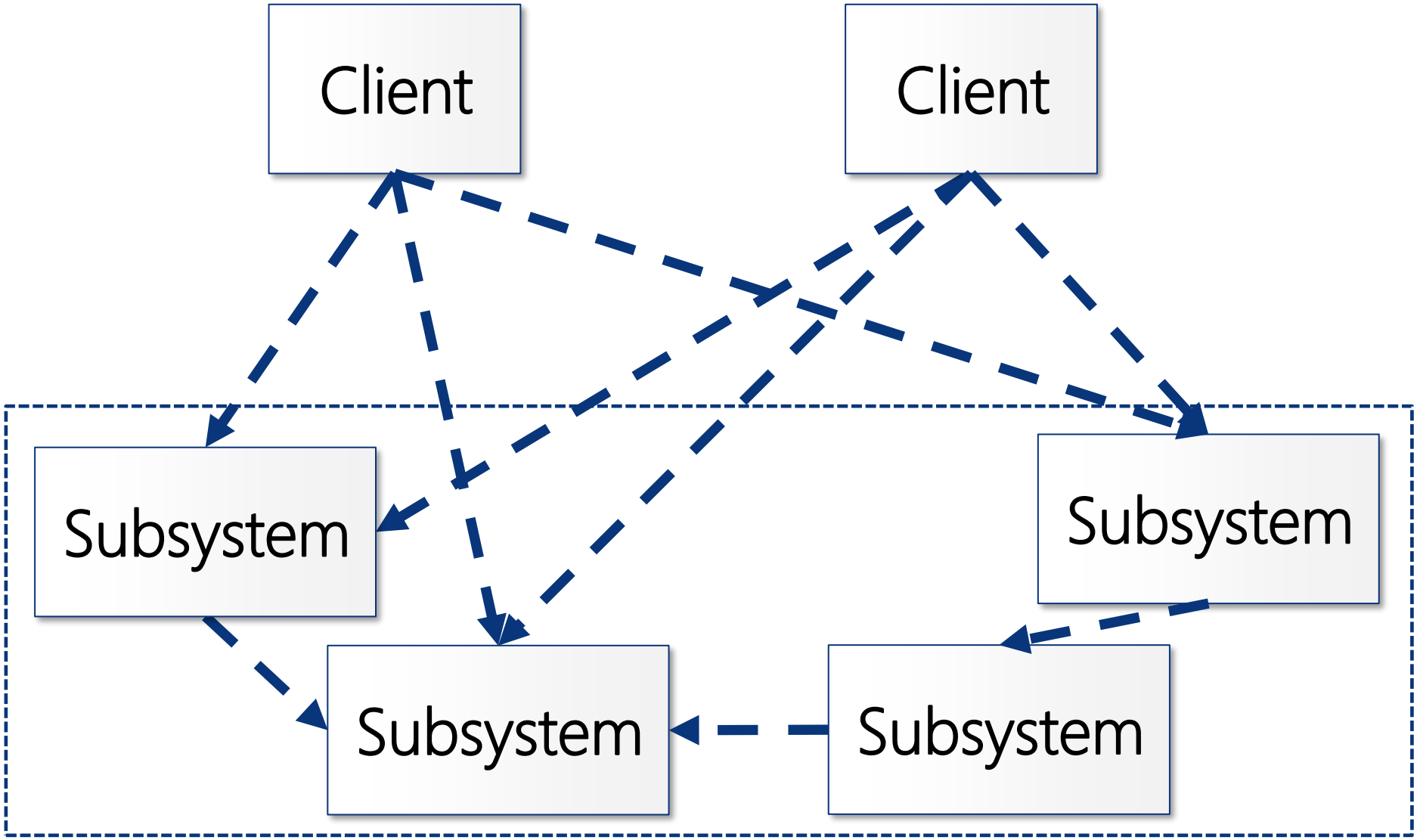
Pattern: Façade

- *Provide a unified interface to a set of interfaces in a subsystem. Façade defines a higher-level interface that makes the subsystem easier to use.*

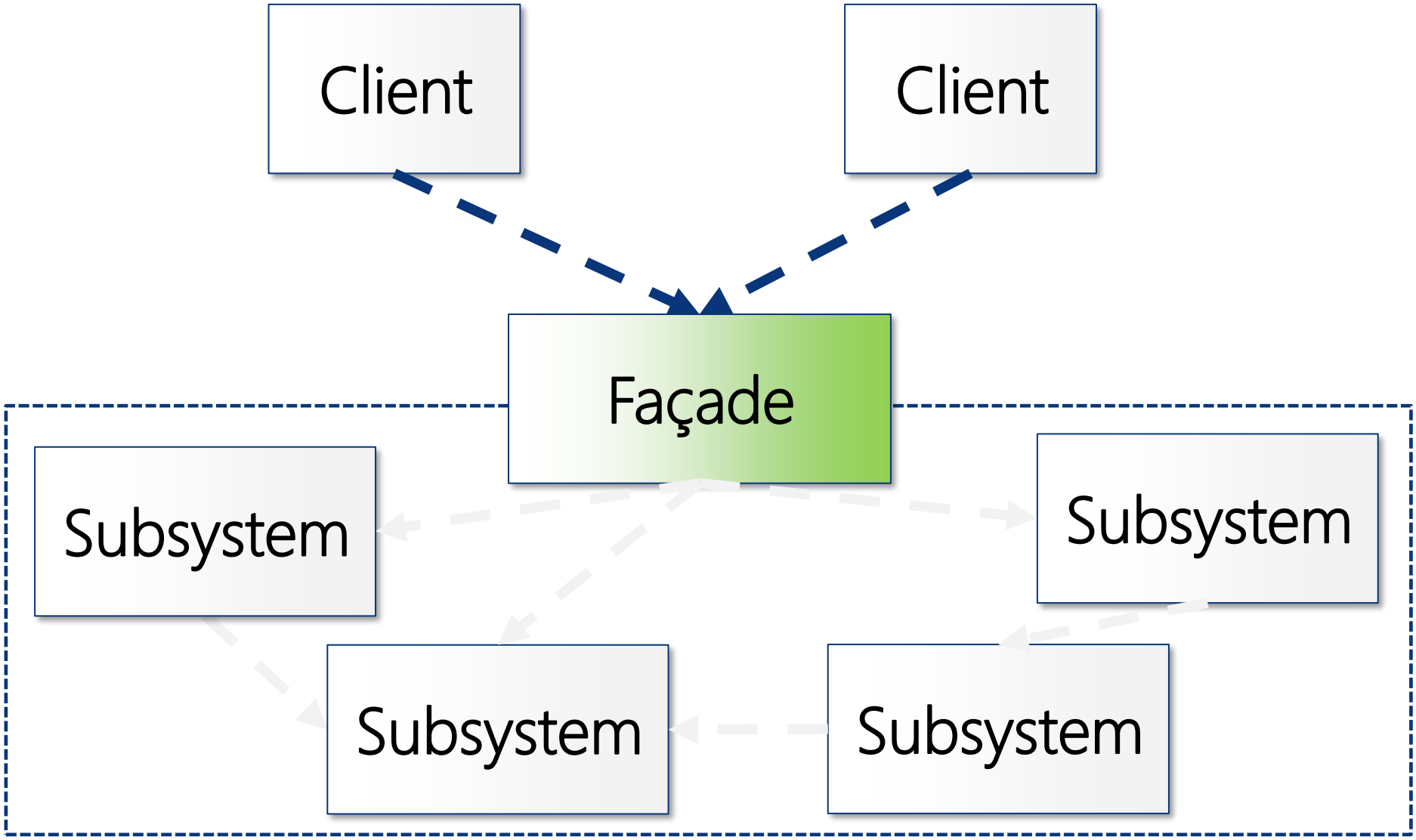
- Outline
  - Isolate subsystems' intricacies from client
  - Make subsystem functionality reusable by clients
  - Loosely couple clients and subsystems

- Origin: Gang of Four

Overview of Façade Pattern



Overview of Façade Pattern



Overview of Façade Pattern

- Client
  - Accesses Subsystems only through Façade
- Façade
  - Provides an entry point for Clients
  - Shields client from subsystem intricacies and complexities
  - Loosely couples Client from Subsystems
  - Makes Subsystems replaceable by other Subsystems without affecting the Clients
- Subsystems
  - Are left unchanged

A Slight Word of Warning

- Do take a little of care in not “overfacading” everything
  - Overlayering
- Carefully consider situations where same subsystems appears in multiple façades
  - Versioning
  - Shared data contexts
  - …
- Remember to implement the Disposable Pattern on your Façade if necessary!


WINCUBATE
Jesper Gulmann Henriksen
PhD, MCT, MCSD, MCPD
Phone : +45 22 12 36 31
Email : jgh@wincubate.net
WWW : http://www.wincubate.net
Ringgårdsvej 4A
8270 Højbjerg
Denmark