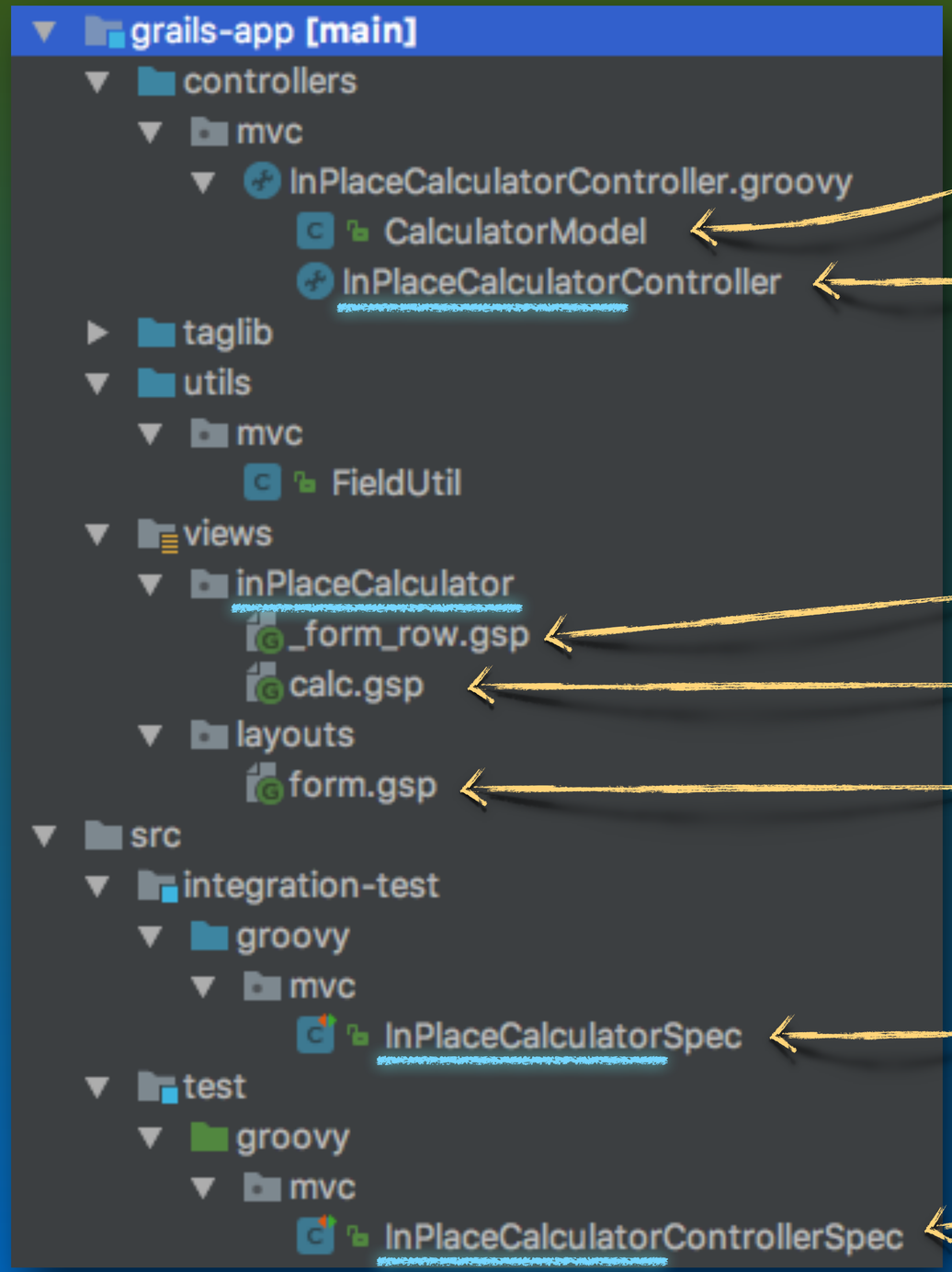
Persistent State

Web Engineering
Prof. D. König
Christian Ribeaud

Overall Structure



model

controller

template

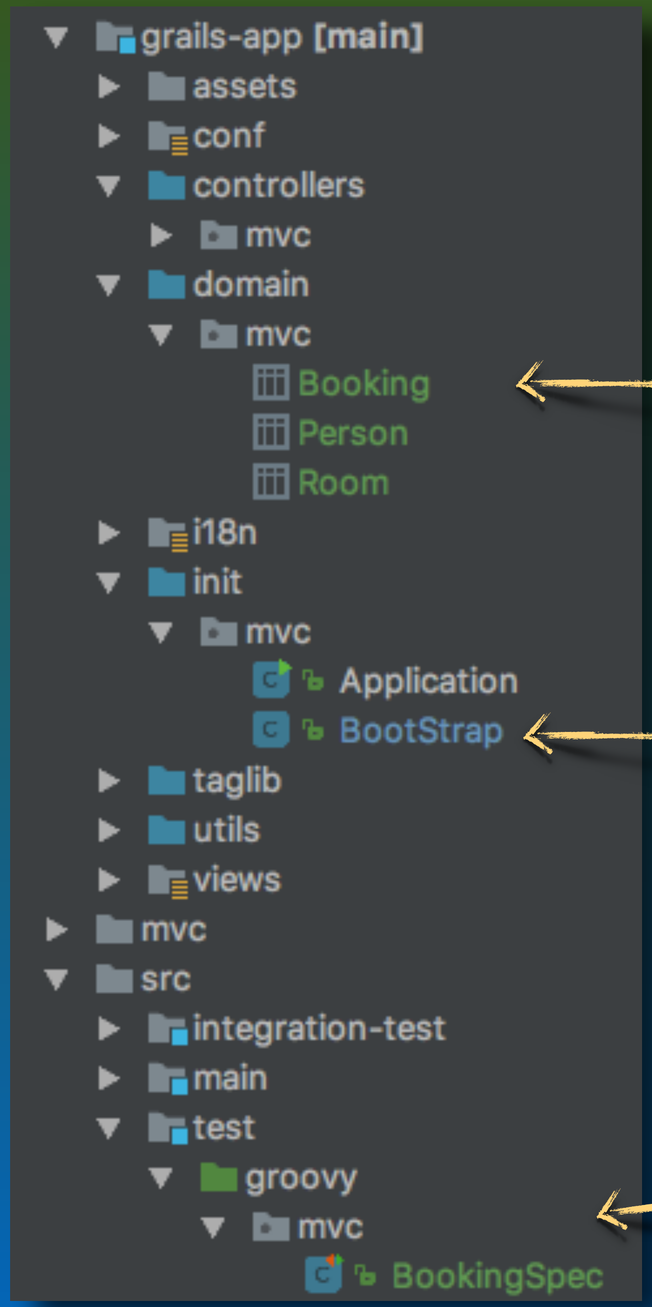
server page

layout

UI test

unit test

Overall Structure



domain model

bootstrap

unit test

Domain Classes

```
package mvc

class Room {

    String description
    int    capacity

    String toString() { description + "(" + capacity + ")" }

    static constraints = {
    }
}
```

CRUD Methods

```
new Room(description: "5.3A17", capacity: 40).save()
Room.list()
Room.findAllByCapacityGreaterThan(20)
def firstRoom = Room.get(1)
firstRoom.delete()
```

Grails ORM

http://docs.grails.org/latest/guide/GORM.html

Domain classes serve as DAO/DTO/Model

DB is set up automatically

Dynamic finder methods simplify usage

Keep it simple

Scaffolding

static scaffold = *domainClassName*

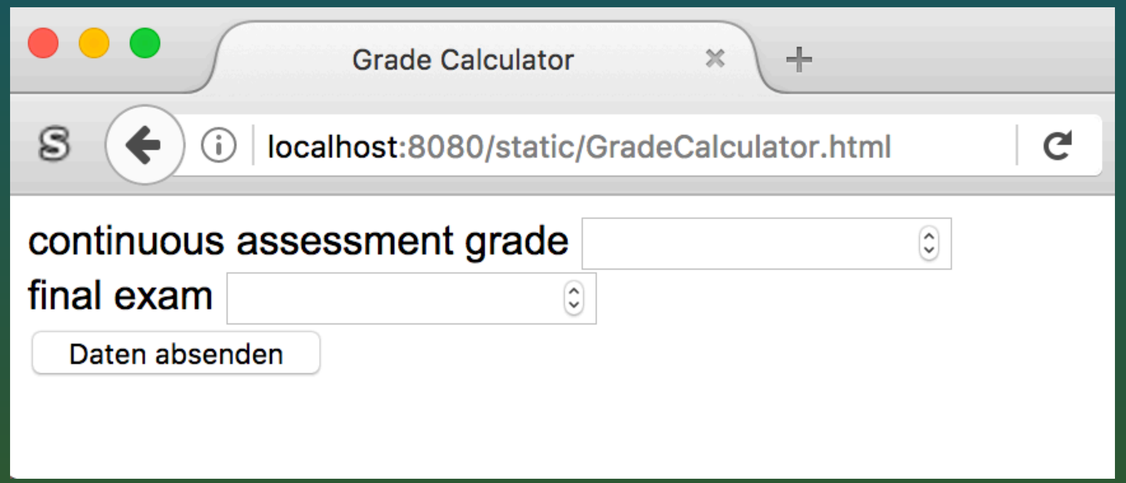
Controller actions and views are created transparently behind the scenes

We can selectively override

HTML, CSS, JavaScript

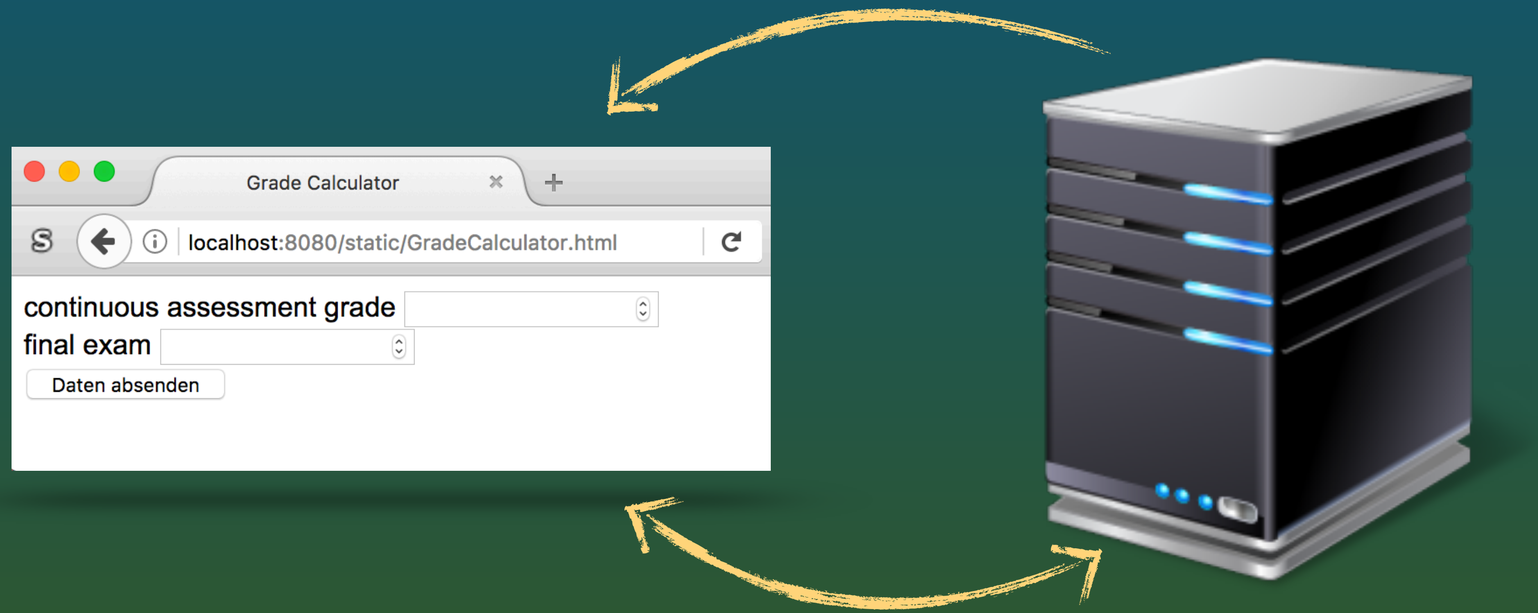
static

dynamic



Web MVC, Server Pages

static



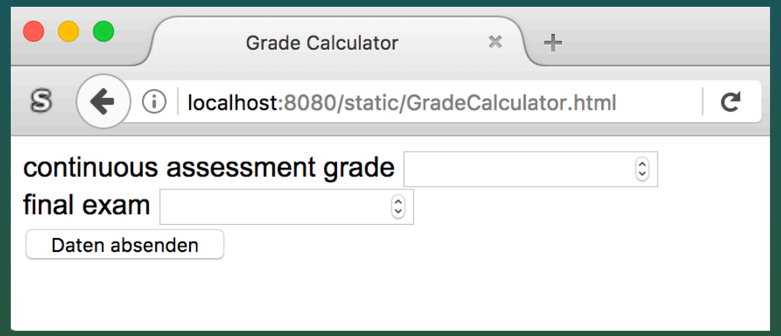
conversational

Three Tier Web Applications

Client

Server

DB



persist

Where State Lives

HTML static	*DOM, forms*
HTML dynamic	*JS, localstorage*
Server static	*Deployment*
Conversation	*Session*
Persistent	*Database*