MVP

Model–View–Presenter

Git project

https://github.com/kjurkovic/mvp_isa

Idea behind the pattern

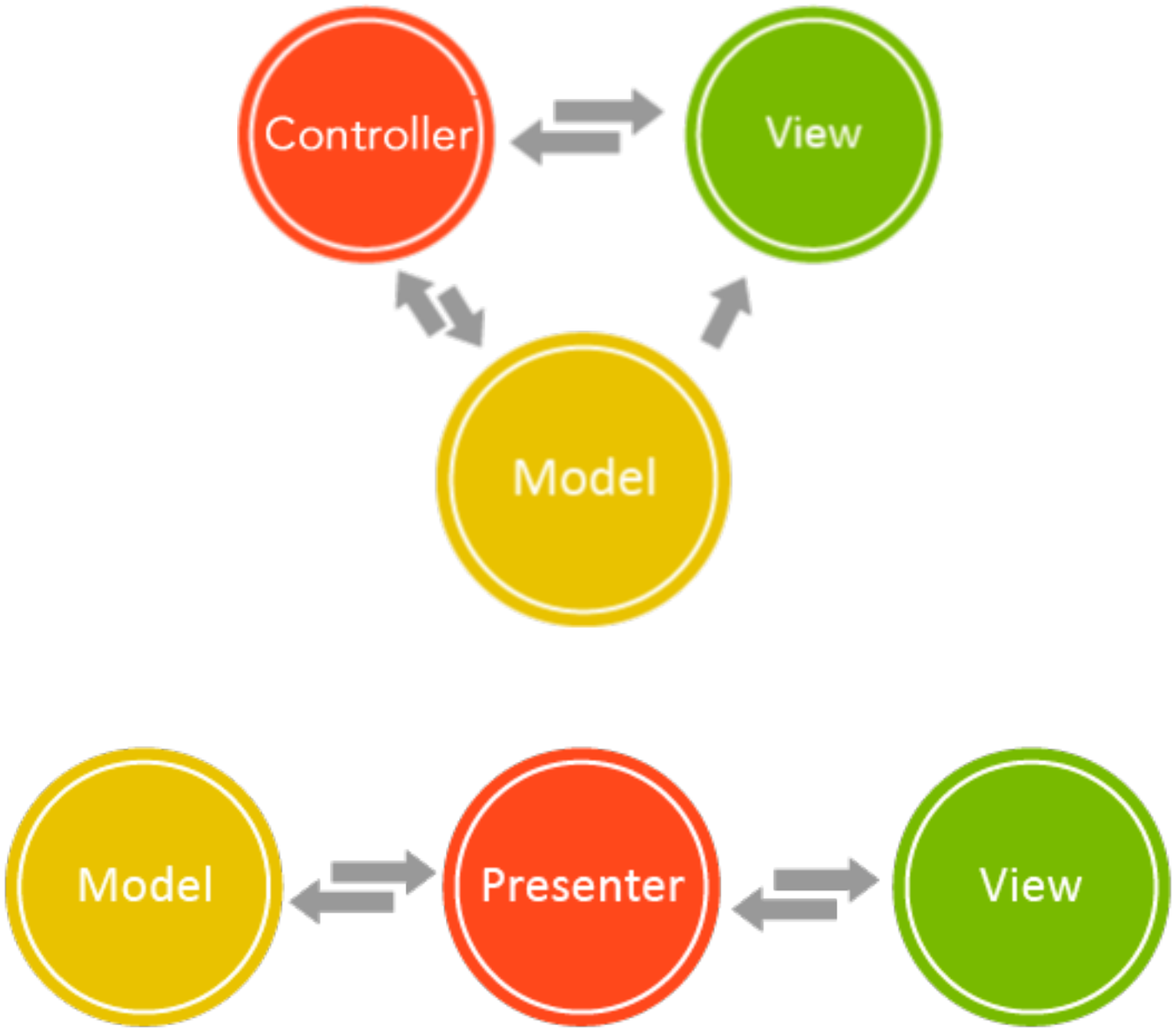
- Odvajanje prezentacijskog sloja od logike i podataka

Što je MVP i zašto ga koristiti?

MVP

- derivacija MVC-a (Model - View - Controller)
- odvaja prezentaciju (view) od logike (presenter) i model (dohvat podataka i management podataka)
- Razlozi?
  - Activity je tightly coupled - sadržava UI, UI logiku i dohvat/management podataka - BAD THING
  - definiranje odvojenih layera nam omogućuje lakše održavanje i izmjene i above all - unit testing

MVP



View

MVP

- Interface (Java) kojeg implementira Activity/Fragment/View
- sadrži metode za kontrolu prikaza podataka koje Presenter može pozvati
- Implementacija View-a kreira referencu na Presenter
- Zove metode Presentera za bilo koju akciju (dohvat podataka, onClick evente, lifecycle evente, onItemClick evente, itd...)

MVP

```
public interface BoatsView {

    void onBoatListReceived(List<Boat> boats);

    void onBoatListEmpty();

    void onBoatListFetchError();

    void onNextPageReceived(List<Boat> boats);

    void onBoatListRefreshed(List<Boat> boats);
}
```

Presenter

MVP

- Controller/Posrednik između View-a i Model-a
- drži reference na Model i na View
- odvaja poslove/podatke i šalje ih ispravnoj komponenti na obradu/ izvršavanje

MVP

```
public interface BoatsPresenter {

    void getBoats();

    void onBoatClicked(Boat boat);
}
```

Model (Interactor)

Mvp

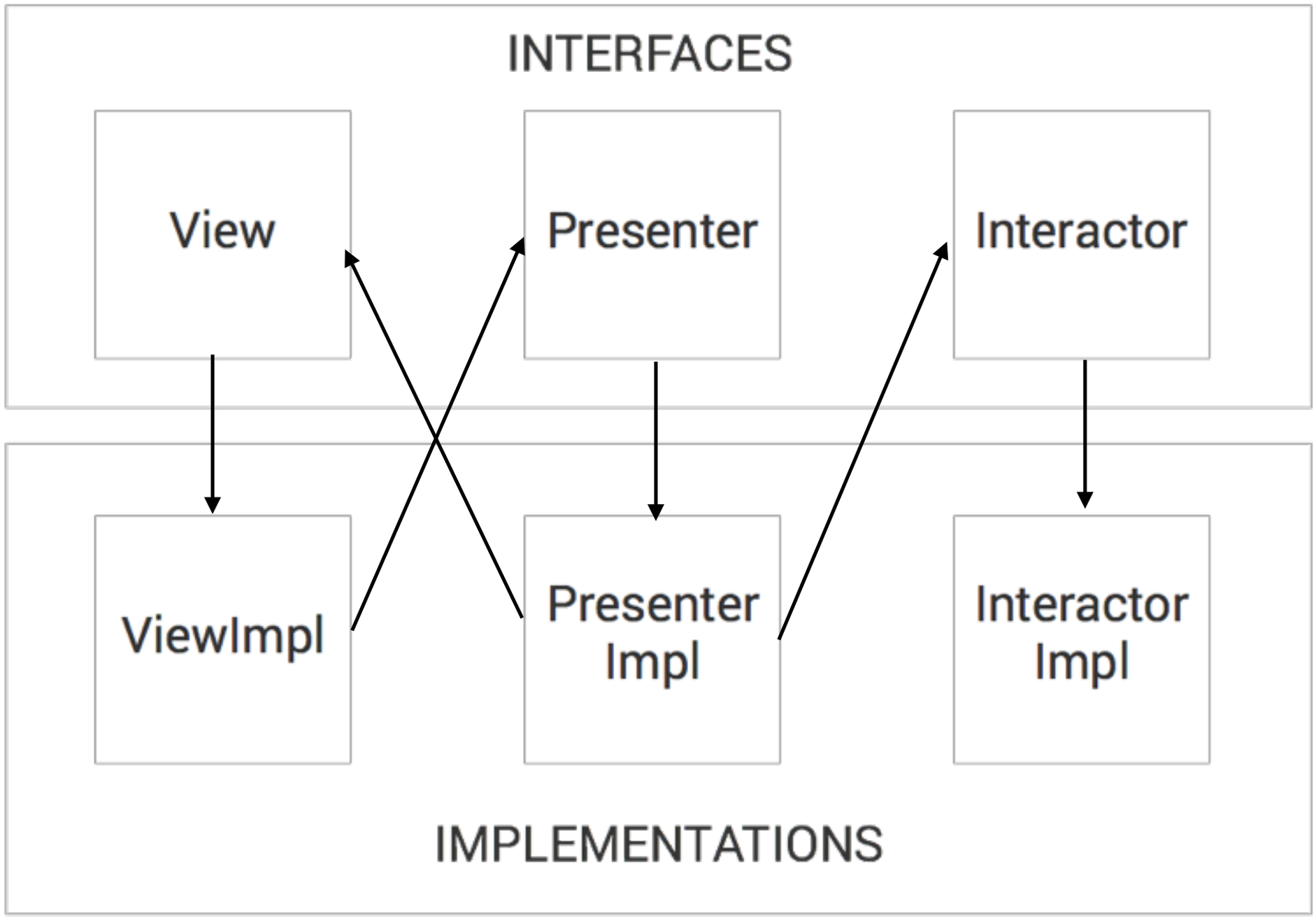
- WTF je interactor?
  - Model koji odrađuje određeni use-case odnosno dio koji izvršava konkretnu akciju (dohvat podataka sa API-a, dohvat podataka iz baze, parsiranje text fileova, itd....)
- nema referencu na presenter ni na view
- prosljeđuje podatke u presenter preko interface-a - listenera (Why?)
  - interactor obično odrađuje svoj dio u background threadu

Mvp

```
public interface BoatsInteractor {

    void getBoats(BoatsListener listener);
}
```

```
public interface BoatsListener {

    void onBoatsReceived(List<Boat>boats);

    void onError(String error);
}
```

MVP

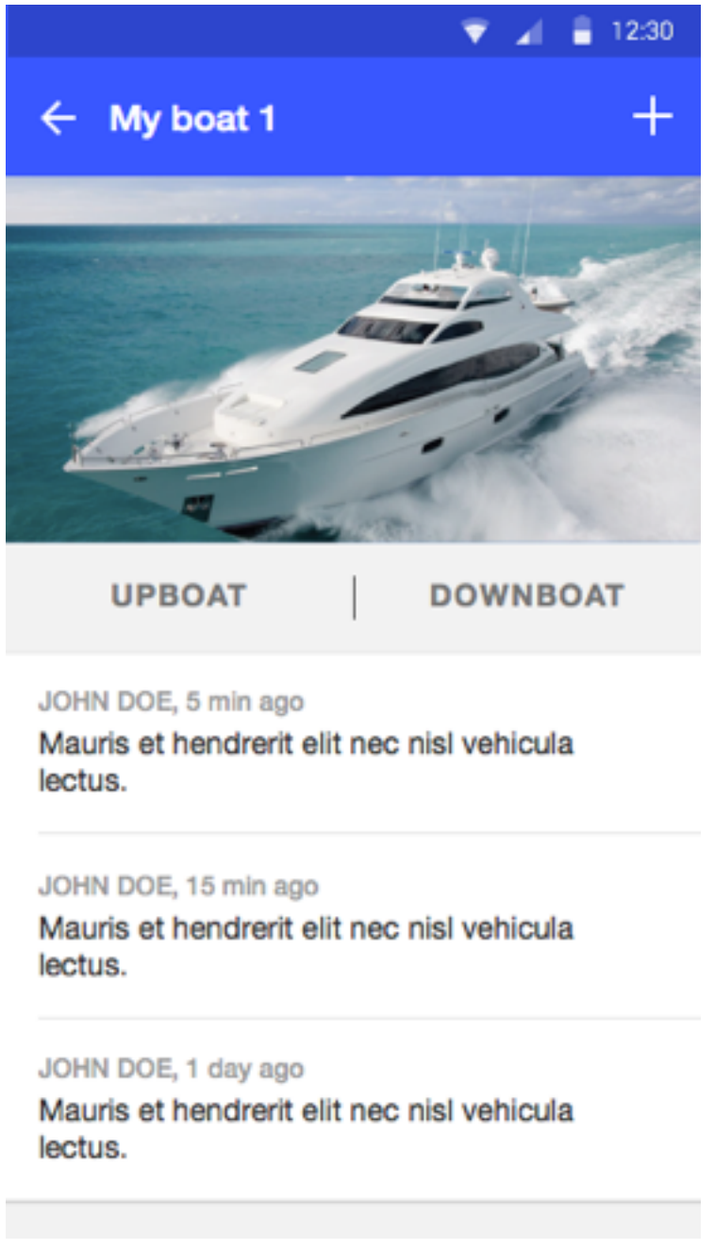


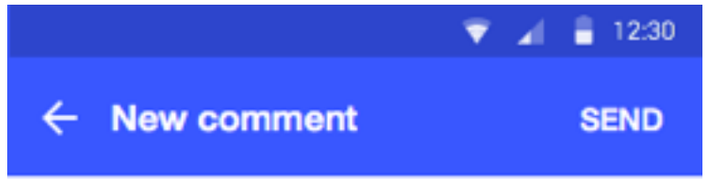
Coding session

Homework

- Napraviti/prebaciti boat details na MVP
- Napraviti dodavanje komentara - isto MVP

Homework





Homework – dodatno

- Ubaciti offline mode za listu brodova
- Ubaciti offline za detalje broda koje korisnik pogleda (ukljucujuci komentare)