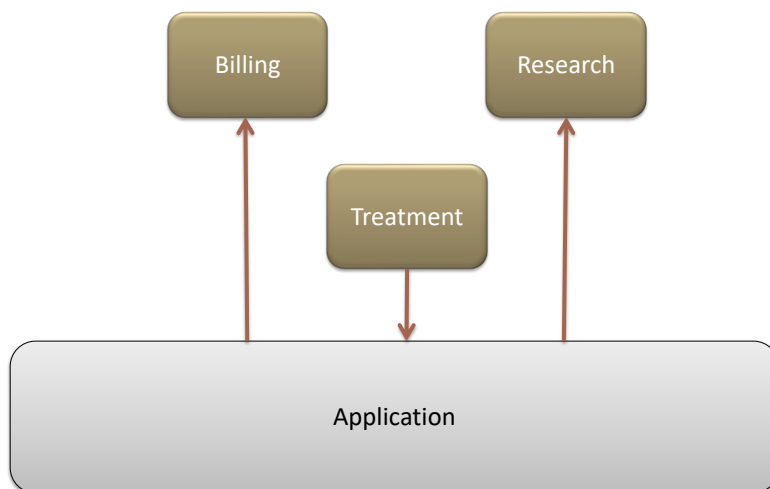


## CDI EVENTS

2

## Publish-Subscribe



3

3

## Event Consumer

```
public class TreatmentEventObserver {  
  
    @Inject  
    EntityManager em;  
  
    BillingDAO billingDao;  
  
    public String onEvent  
        (@Observes Event<TreatmentDto> event) {  
        TreatmentDto dto = event.getEventMessage();  
        // Persist a billing record to the DB  
    }  
}
```

4

## Event Producer

```
@RequestScoped  
public class Provider {  
  
    @Inject  
    Event<TreatmentDto> treatmentEvent;  
  
    ProviderDAO providerDao;  
  
    public long addTreatment(TreatmentDto dto) {  
        ...  
        // Notify any observers of the addition of a treatment  
        treatmentEvent.fire(dto);  
        ... // This may be a problem  
    }  
}
```

5

## Event Producer

```
@RequestScoped
public class Provider {

    @Inject
    Event<TreatmentDto> treatmentEvent;

    ProviderDAO providerDao;

    public long addTreatment(TreatmentDto dto) {
        ...
        // Notify any observers of the addition of a treatment
        treatmentEvent.fireAsync(dto);
        ...
    }
}
```

6

## Event Consumer

```
public class TreatmentEventObserver {

    @Inject
    EntityManager em;

    ResearchDAO researchDao;

    public String onEvent
        (@Observes @DrugTreatmentEvent
         Event<TreatmentDto> event) {
        TreatmentDto dto = event.getEventMessage();
        // Persist a research record to the DB
    }
}
```

7

## Event Producer

```
@RequestScoped
public class Provider {

    @Inject @DrugTreatmentEvent
    Event<TreatmentDto> treatmentEvent;

    ProviderDAO providerDao;

    public long addTreatment(TreatmentDto dto) {
        ...
        // Notify any observers of the addition of a treatment
        treatmentEvent.fireAsync(dto);
        ...
    }
}
```

8

## Event Producer

```
@RequestScoped
public class Provider {

    @Inject
    Event<TreatmentDto> treatmentEvent;

    ProviderDAO providerDao;

    public long addTreatment(TreatmentDto dto) {
        ...
        // Notify any observers of the addition of a treatment
        if (this is a drugtreatment event)
            treatmentEvent
                .select( new DrugTreatmentEventQualifer() )
                .fireAsync(dto);
        ...
    }
}
```

9