



CS1 Task 14: Abschluss

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Abschlusspräsentation

- Vorführung von: Health Visitor
- Reviews der Entwickler
- Gesammelte Erfahrungen

Demo: Health Visitor

- Kurze Vorführung des Prototyps

Persönliches Review der Entwickler

- Mathias Rudolf: Datenaufbereitung & Datenbank
- Tobias Flühmann: Datenspeicherung
- Remo Häusler: Medikation
- Raphael Suter: Rapportierung
- Florian Auderset: UI Design

Datenaufbereitung & Datenbank

person.csv

	ID,	TYPE,	DATEOFBIRTH,	EMAIL,	FIRSTNAME,	LASTNAME,	PASSWORD,	EMPLOYEEENUMBER,	HIREDATE,	WORKINGHOU
1	1,	'H',	'1980-01-01',	'test@user.ch',	'Test',	'User',	'secret_2016',	1,	'1999-01-01',	40,'Relation?',NULL,1
2	2,	'H',	'1988-02-02',	'hans@wurst.ch',	'Hans',	'Wurst',	'secret_2016',	2,	'2002-10-01',	29,'Relation?',NULL,2
3	3,	'H',	'1977-06-08',	'heidi@blume.ch',	'Heidi',	'Blume',	'secret_2016',	3,	'2005-01-01',	40,'Relation?',NULL,3
4	4,	'H',	'1960-06-22',	'lisa@vogel.ch',	'Lisa',	'Vogel',	'secret_2016',	4,	'2001-05-01',	32,'Relation?',NULL,4
5	5,	'H',	'1950-11-01',	'hansi@fausi.ch',	'Hansi',	'Fausi',	'secret_2016',	5,	'2010-06-01',	40,'Relation?',NULL,5
6	0050	,	'K',	'1964-01-29',	'Roxanne@Neugebauer.ch',	'Roxanne',	'Neugebauer',	NULL,	NULL,	NULL,
7	0051	,	'K'							
8	0052	,	'K'							
9	0053	,	'K'							

appointment.csv

	ID,	ADDRESS,	PLACE,	STARTTIME,	ENDTIME,	STATE,	CLIENT_ID,	HV_ID
1	0112,	'Marzillistrasse 12',	'3000 Bern',	strftime('%s','2016-06-06 15:15:00'),	strftime('%s','2016-			
2	0113,	'Aarbergergasse 5',	'3000 Bern',	strftime('%s','2016-06-06 11:00:00'),	strftime('%s','2016-			
3	0114,	'Marzillistrasse 10',	'3000 Bern',	strftime('%s','2016-03-30 11:00:00'),	strftime('%s','2016-			
4	0115,	'Monbijoustrasse 10',	'3000 Bern',	strftime('%s','2016-02-18 11:00:00'),	strftime('%s','2016-			
5	0116,	'Genfergasse 16',	'3000 Bern',	strftime('%s','2016-01-14 08:30:00'),	strftime('%s','2016-01-1			
6	0117,	'Bernstrasse 14',	'3000 Bern',	strftime('%s','2016-06-06 11:30:00'),	strftime('%s','2016-06-0			
7	0118,	'Monbijoustrasse 11',	'3000 Bern',	strftime('%s','2016-04-25 16:30:00'),	strftime('%s','2016-			
8	0119,	'Spitalacker 6',	'3000 Bern',	strftime('%s','2016-02-29 15:30:00'),	strftime('%s','2016-02-2			
9	0120,	'Marzillistrasse 9',	'3000 Bern',	strftime('%s','2016-01-11 16:30:00'),	strftime('%s','2016-			

```
while ((line = reader.readLine()) != null) {
    if (line.isEmpty())
        continue;

    if (delimiter != ',') {
        line = line.replace(delimiter, ',');
    }

    if (lineCount == 0) {
        if (deleteFirst) {
            sb.append(String.format("DELETE FROM %1$s;", tableName));
            firstLine = String.format(" INSERT INTO %1$s (%2$s) ", tableName, line);
            deleteFirst = false;
        }
    } else if (lineCount == 1) {
        sb.append(firstLine);
        sb.append(String.format(" SELECT %1$s ", line));
    } else {
        sb.append(String.format(" UNION ALL SELECT %1$s ", line));
    }

    if (lineCount >= SQLITE_MAX_COMPOUND_SELECT) {
        statement = conn.createStatement();
        statement.executeUpdate(sb.toString());

        sb.setLength(0);
        lineCount = 1;
    } else {
        lineCount++;
    }
}
```

Datenspeicherung

- Datenbank oder Files
- Datenbank → SQL
- Datenbankevaluation
 - Online Instanz MySQL
 - Lokale sqlite3 DB
- JPA
- Evaluation
 - Eclipselink
 - Hibernate
 - Apache Open JPA

Datenspeicherung

```
@Entity(name="appointment")
@Table(name="APPOINTMENT")
public class AppointmentEntity implements AppointmentState {
    public AppointmentEntity() {
        super();
        this.setState(new PlannedState());
    }

    @Id
    @GeneratedValue(strategy= GenerationType.AUTO)
    private int id;

    private String address;
    private String place;

    @org.eclipse.persistence.annotations.Index
    private long startTime;
    @Index
    private long endTime;

    @Lob
    @Column(name="STATE")
    private AppointmentState state;

    @ManyToOne(fetch=FetchType.EAGER)
    @JoinColumn(name="HV_ID")
    private HealthVisitorEntity hv;
```

```
public class GenericDao<E, K extends Serializable> implements Dao<E, K> {
    protected static final EntityManagerFactory factory = Persistence.createEntityManagerFactory("pers");
    protected EntityManager entityManager;

    protected void init() {
        this.entityManager = factory.createEntityManager();
        ParameterizedType genericSuperclass = (ParameterizedType) getClass().getGenericSuperclass();
        this.entityClass = (Class<E>) genericSuperclass.getActualTypeArguments()[0];
    }
    protected Class<E> entityClass;

    @Override
    public E update(E entity) {
        entityManager.getTransaction().begin();
        entityManager.merge(entity);
        entityManager.getTransaction().commit();
        return entity;
    }

    @Override
    public E persist(E entity) {
        entityManager.getTransaction().begin();
        entityManager.persist(entity);
        entityManager.refresh(entity);
        entityManager.getTransaction().commit();
        return entity;
    }

    @Override
    public void remove(E entity) {
        entityManager.getTransaction().begin();
        entityManager.remove(entity);
        entityManager.getTransaction().commit();
    }

    @Override
    public E refresh(E entity) {
        entityManager.getTransaction().begin();
        entityManager.refresh(entity);
        entityManager.getTransaction().commit();
        return entity;
    }

    @Override
    public E findById(K id) {
        entityManager.getTransaction().begin();
        E entity = entityManager.find(entityClass, id);
        entityManager.getTransaction().commit();
    }
}
```


Medikation

Medikamente die Sie heute mitbringen müssen:


<input type="checkbox"/>	Packung(en)	Name
<input type="checkbox"/>	3	Cognex®
<input checked="" type="checkbox"/>	1	Rivastigmin

```
// View
Grid grid = new Grid(container);
grid.addSelectionListener(
    .... new SelectMedicationListener(controller, grid));

// Listener (SelectMedicationListener)
public void select(SelectionEvent event) {
    .... controller.check(event.getAdded());
    .... controller.uncheck(event.getRemoved());
}

// Controller
public void check(Collection<MedicationEntity> medications) {
    .... for (MedicationEntity medication : medications) {
    ....     medication.setChecked(true);
    ....     medicationDao.update(medication);
    .... }
}
```

Rapportierung

Termin details  angemeldet als: Test User Abmelden

Rapport bearbeiten

Behandlungsbeginn:

Ende der Behandlung:

RichTextEditor

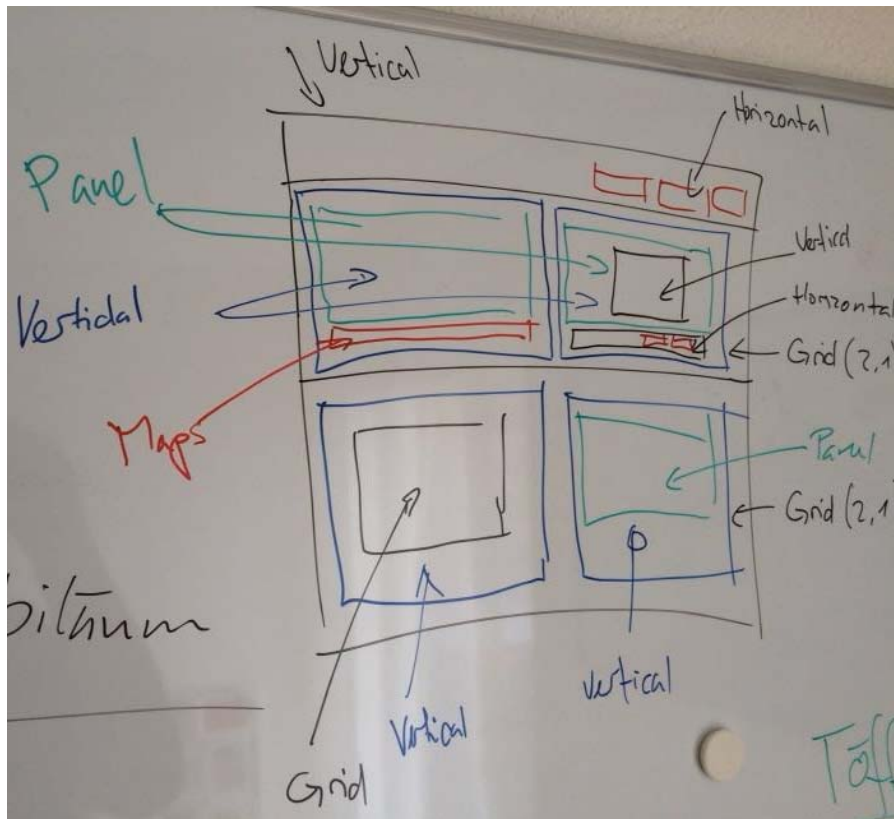
Background: Foreground: Font: Size:

Kein Rapport vorhanden

ID	Name
1	convuls nulla neque
2	et amet nulla quisque arcu
3	

```
public class AppointmentDetailView extends BaseView {  
  
    private void createNewReport() {  
  
        public class ReportComponent extends CustomComponent {  
            private void initialize() {  
                Date startDate = report.getStartDate();  
                DateField arrival = new DateField();  
                arrival.setValue(startDate);  
                arrival.setResolution(Resolution.MINUTE);  
                content.addComponent(arrival);  
  
                Date endDate = report.getEndDate();  
                DateField end = new DateField();  
                end.setValue(endDate);  
                end.setResolution(Resolution.MINUTE);  
                end.addValidator(new DateRangeValidator("Ende muss nach dem start liegen", _  
                    arrival.getValue(), arrival.getRangeEnd(), Resolution.DAY));  
                content.addComponent(end);  
  
                RichTextArea text = new RichTextArea();  
                if(report.getDescription() != null) text.setValue(report.getDescription());  
                text.addValidator(new StringLengthValidator("Bitte geben Sie einen Text ein", _  
                    10, Integer.MAX_VALUE, false));  
                content.addComponent(text);  
  
                btnSave.addClickListener(clickevent -> {  
                    controller.save(arrival, end, text, appointment, report);  
                    window.close();  
                    UI.getCurrent().getNavigator().navigateTo(AppointmentDetailView.NAME);  
                });  
            }  
        }  
    }  
}
```

UI Design



Ankunft bestätigen

Termininformationen	Patienteninformationen
Datum: 15.06.2016	Name: Jean-Claude Grunder
Zeit: 17:00 - 18:00	Geburtsdatum: 05.08.1958
Adresse: Monbijoustrasse 5, 3000 Bern	Details: aasdfsdf bumsen. blah blah.

Karte Satellit

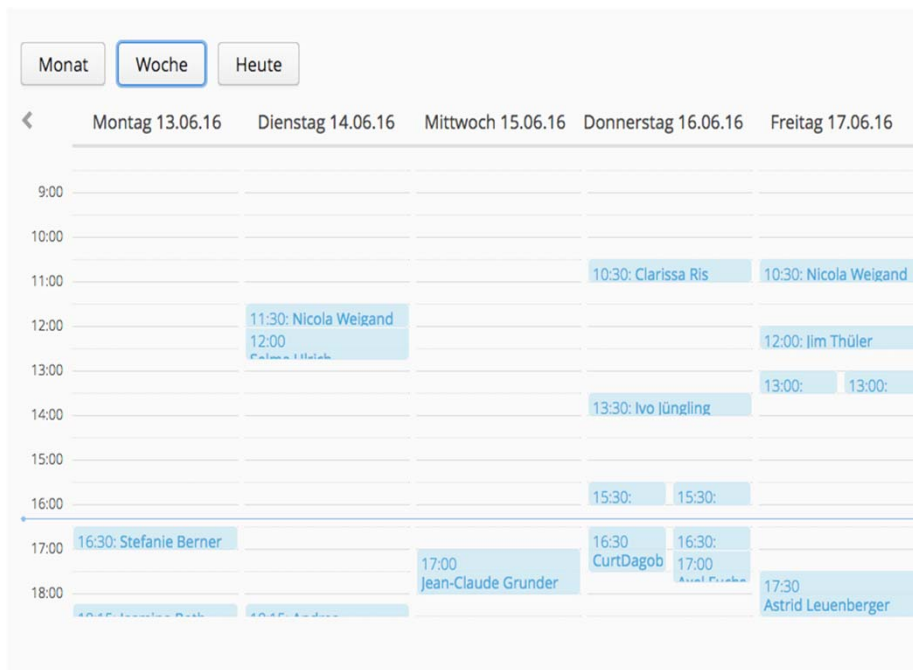
Karte Satellit

Patientendetails

Notfallkontakte des Patienten

Aufgabenliste	Aktueller Rapport
<input type="checkbox"/> Name	Kein Rapport vorhanden
<input checked="" type="checkbox"/> semper rutrum nulla nunc purus	<div>Rapport erstellen</div>
<input type="checkbox"/> nulla justo aliquam quis	
<input type="checkbox"/> ipsum dolor sit	

UI Design



```
1 package ch.bfh.bti7081.s2016.purple.HealthVisitor.events;
2
3 import com.vaadin.ui.components.calendar.event.BasicEvent;
4
5
6
7 public class AppointmentEvent extends BasicEvent {
8
9     protected AppointmentEntity appointment;
10
11     public AppointmentEvent(AppointmentEntity appointment){
12         super( appointment.getClient().getFullName(),
13               appointment.getAddress(),
14               appointment.getStartTime(),
15               appointment.getEndTime()
16             );
17         this.appointment = appointment;
18     }
19
20     public AppointmentEntity getAppointment() {
21         return appointment;
22     }
23 }
```

Gesammelte Erfahrungen

- Von den Storyboards zur Implementation
- Rückblick auf die Entwicklung mit Scrum
- Zusammenarbeit im Team
- Allgemeiner Rückblick

Von den Storyboards zur Implementation

The image shows a web application dashboard for 'Health Visitor' and a corresponding storyboard on the left. Two purple arrows indicate the mapping from storyboard elements to the implemented UI.

Storyboard (Left):

- 4 BENUTZERANFANG**
 - 4.1 USE CASE DIAGRAM**
 - 4.1.1 ALARMIERUNG
 - 4.1.2 RAPPORTIERUNG
 - 4.1.3 AKTUELLER TERMIN
 - 4.1.4 MEDIKAMENTE FÜR HEUTE
 - 4.1.5 TERMINE FÜR HEUTE
 - 4.2 DETAILIERTE USE CASES**
 - 4.2.1 MEDIKAMENTE BESTÄTIGEN
 - 4.2.2 RAPPORTIERUNG

Dashboard (Right):

The dashboard is titled 'Dashboard' and shows the user is logged in as 'Test User' with a 'Logout' button. The 'Health Visitor' logo is in the top right corner.

Top Section:

- Search bar: Meeb...
- Greeting: Willkommen Heidi, was möchtest du?
- Buttons: Medikamente Heute, Termine Heute, Alarm, Termine

Grid of Widgets:

- Aktueller Termin (Clock icon)
- Termine heute (Calendar icon with X)
- Terminliste (Calendar icon)
- Alarm (Heart with pulse icon)
- Meine Patienten (Group of people icon)
- Medikamente heute (First aid kit icon)

Arrows:

- A purple arrow points from the '4.1.1 ALARMIERUNG' storyboard element to the 'Alarm' button in the dashboard.
- A purple arrow points from the '4.1.3 AKTUELLER TERMIN' storyboard element to the 'Aktueller Termin' widget in the dashboard.

Entwicklung mit Scrum

- Scrum Master
- Backlogs
- Planung der Sprints inkl. Zeitmanagement

Zusammenarbeit im Team

- Einer für alle, alle für einen.
- Probleme wurden im Daily Scrum angesprochen und konnten sofort an andere weitergegeben werden.
- Agile Verantwortung der Tasks
- Skype!

Allgemeiner Rückblick
