



Tajne ADF Scheduling Gantta

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ISTRA TECH d.o.o.

Oracle ADF

Tajne ADF Scheduling Gantta



Mish Wellness

MisH Wellness
ISTRA INFORMATIČKI INŽENJERING d.o.o. (Ishotel)

Wellness Pregled tretmana Matični podaci

03.06.2015 * Org. jedinica 0025 PC LORENA

Vanjski klijent Preko rezervacije Gost hotela Tretmani za gosta

Ime i prezime	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
DEJAN PRINCE		dddd LOCEAN TRETM...						DIANA MOŠNJA LOCEAN TRETM...								9999 ANT...			DIANA MOŠNJA LOCEAN TRETM...
DIANA PERKOVIĆ		DIA... ANT...			DIANA PERKOVIĆ LOCEAN TRETM...							dddd LOCEAN TRETM...				DIA... ANT...			
ELENA VUČKOVIĆ					DAVOR BRENKO LOCEAN TRETM...					adasd LOCEAN TRETM...									
GORAN MIKIĆ								xxx LOCEAN TRETM...		DIANA MOŠNJA LOCEAN TRETM...		sdfsd LOCEAN ...							
INES MOŠNJA														sdfsd SUPREME CHOC...				hfghtgh LOCEAN TRETM...	
KRISTINA ANAMARIA PERCAN P...												DIANA MOŠNJA LOCEAN TRETM...							
MAJA KOVAČIĆ																			

2



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Mish Wellness - Tehnologija

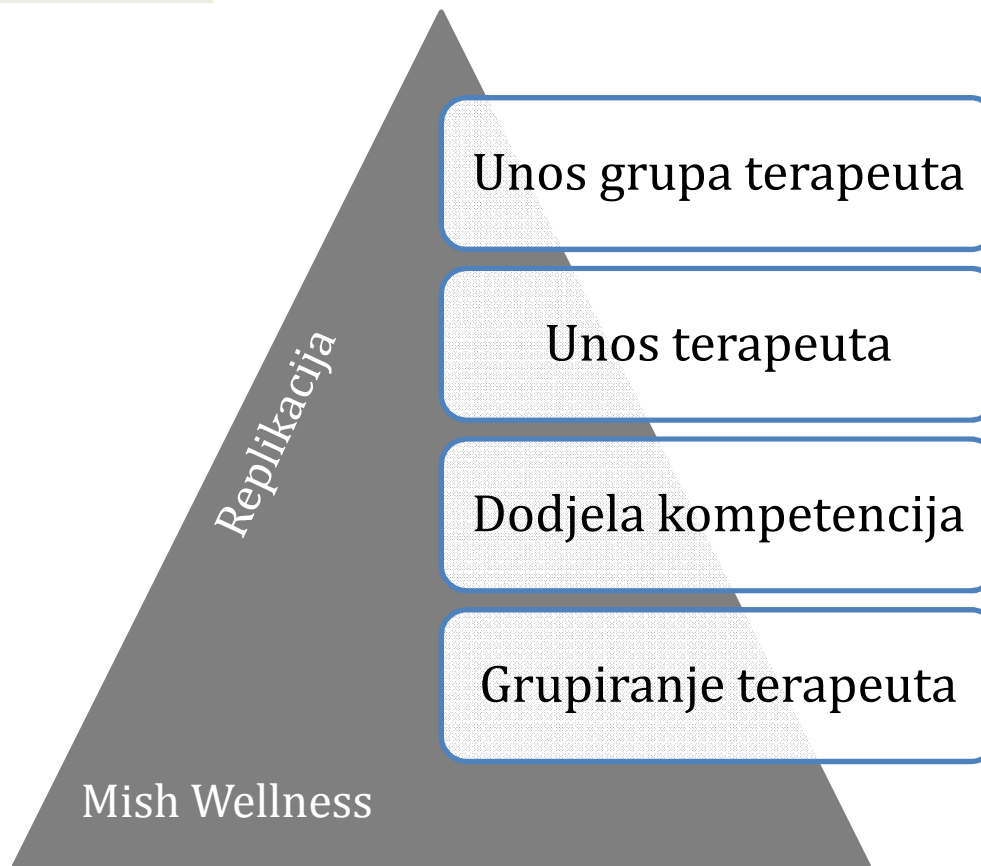
Tehnologija	Verzija
Oracle ADF Essentials	12.1.3
Oracle baza	11.x, 12.1
Oracle GlassFish	3.1



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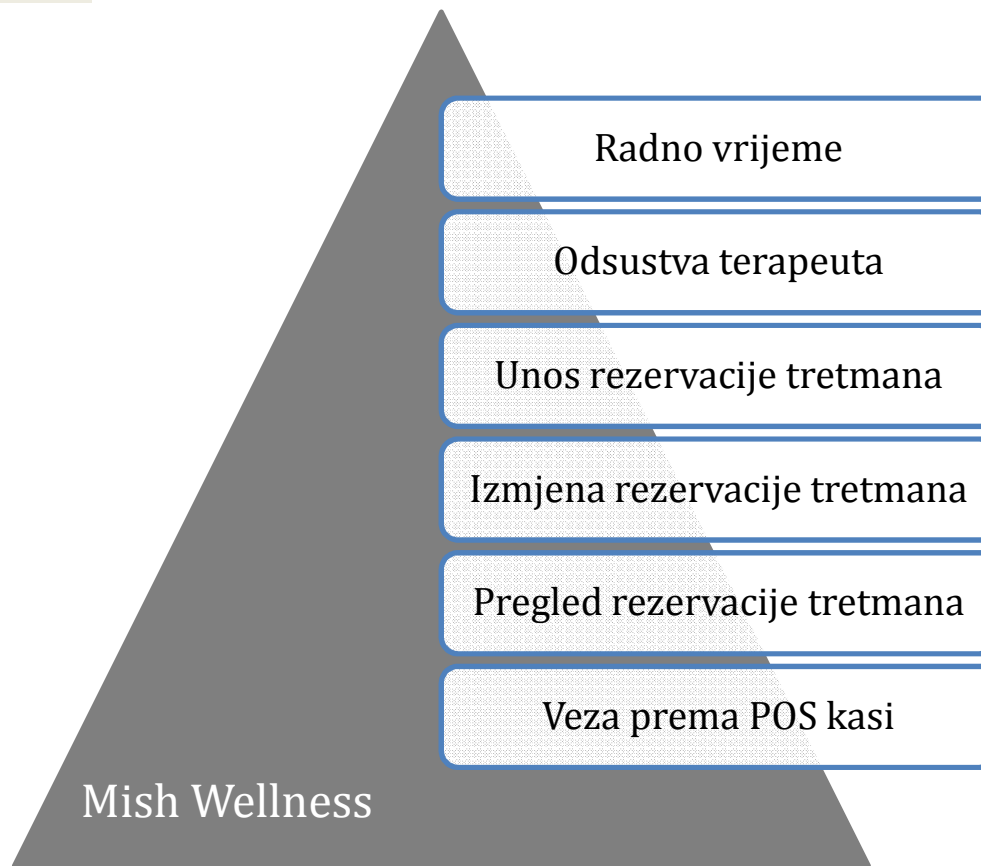
Mish Wellness Centar - funkcije



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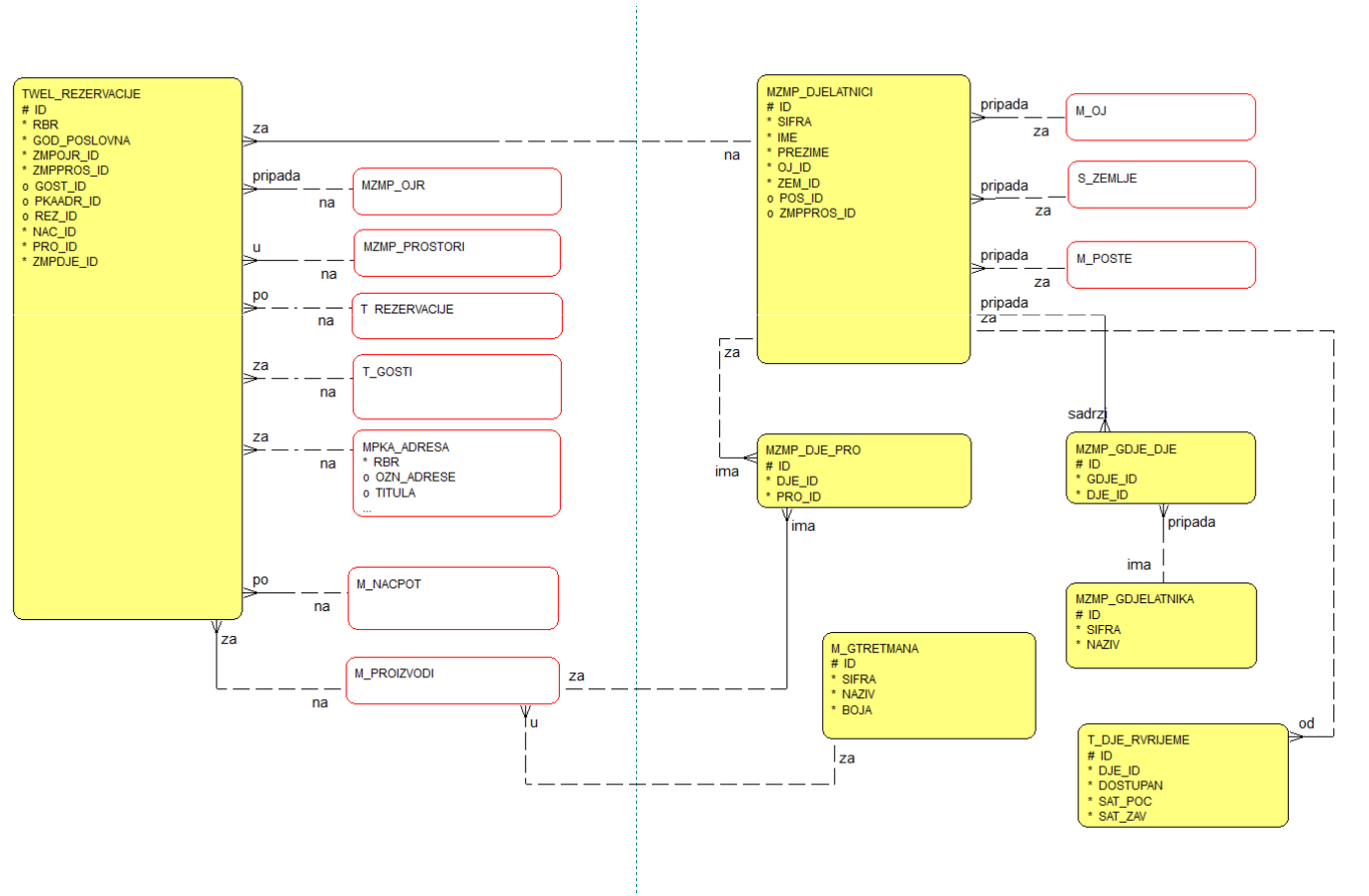
Mish Wellness - funkcije



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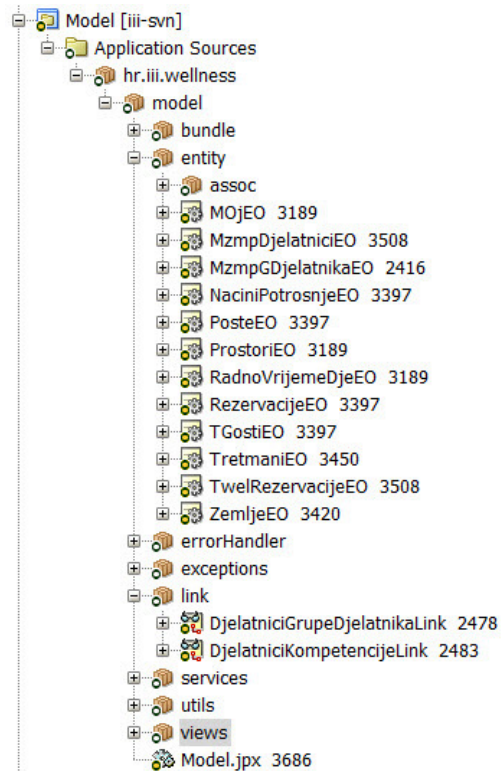
Mish Wellness – DB model



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Mish Wellness – ADF model



Model

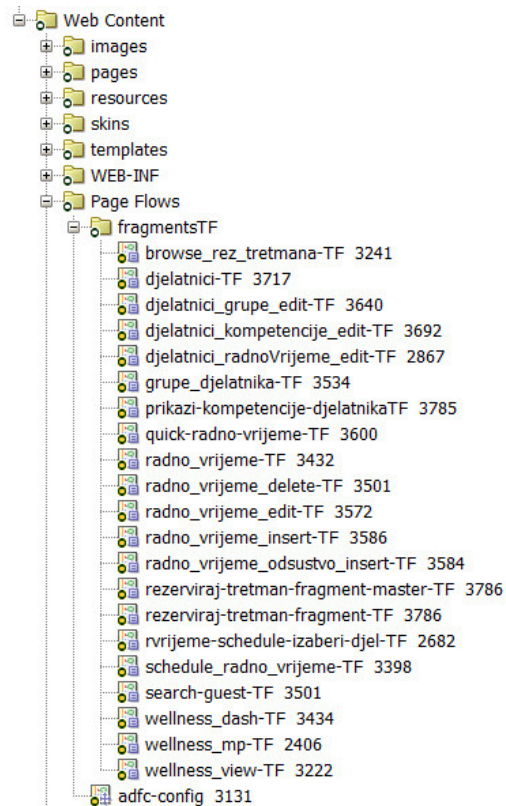
- ❖ 12 entiteta, 50-tak view objekata
- ❖ 21 asocijacija, 2 linka
- ❖ 1 AM – 40-tak izloženih metoda



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Mish Wellness – ADF Task Flow



Task Flow's

- ❖ 1 unbounded task flow
- ❖ 21 bounded task flow



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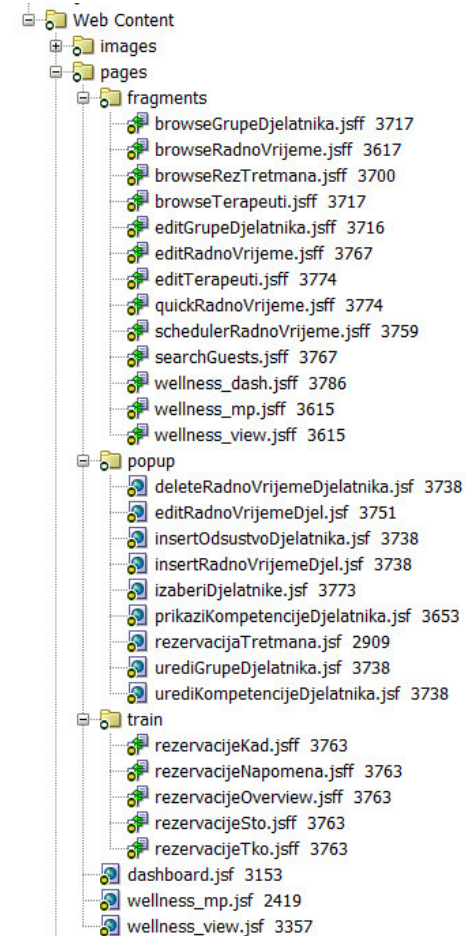
Tajne ADF Scheduling Gantta



Mish Wellness – ADF Pages

Pages

- ❖ 12 stranica (*.jsf)
- ❖ Train model (5 fragmenata *.jsff)
- ❖ Dodatnih 13 fragmenata (*.jsff)



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Mish Wellness – Scheduling Gantt

Scheduling gantt koristi se za unos, izmjenu i prikaz resursa. Resursi su prikazani na vertikalnoj osi gantta, dok su aktivnosti prikazane Na horizontalnoj vremenskoj osi.

Scheduling gantt koristi jednu liniju za prikaz svih aktivnosti koje su dodijeljene jednom određenom resursu.



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Mish Wellness – Scheduling Gantt

The screenshot shows a scheduling Gantt chart for 'petak, listopad 9, 2015'. The interface includes a toolbar at the top with navigation and filter icons, a list of resources on the left, and a main grid showing activities for various clients. A context menu is open over a specific activity, and a tooltip is displayed for that activity. A legend at the bottom left defines activity types by color and shape.

Toolbar (indicated by an arrow pointing to the top navigation icons)

Resursi (indicated by an arrow pointing to the resource list on the left)

Vremenska os (indicated by an arrow pointing to the time axis at the top of the grid)

Aktivnosti (indicated by an arrow pointing to the activity blocks in the grid)

Legenda (indicated by an arrow pointing to the legend at the bottom left)

Context menu (indicated by an arrow pointing to the menu over the 'MIRJANA PAVL...' activity)

Tooltip (indicated by an arrow pointing to the tooltip for 'DANIJEL PERKOVIĆ' activity)

Activity Details (from tooltip):

- SJ - Klijent DANIJEL PERKOVIĆ
- Razdoblje boravka -
- Tretman ANTI-STRESS TRETMAN
- Termin 11:30 - 12:10
- Trajanje 40
- Iznos 70,00
- Prostor SMOOTH ROOM (1503)
- Napomena



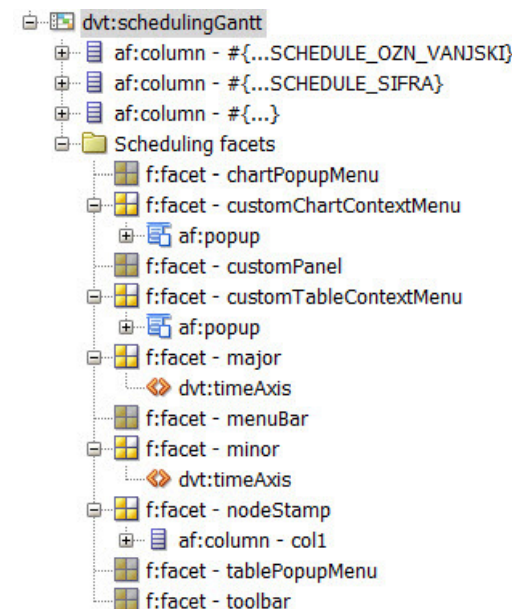
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Mish Wellness – Scheduling Gantt

<dvt:schedulingGantt> Iskorišteni faceti

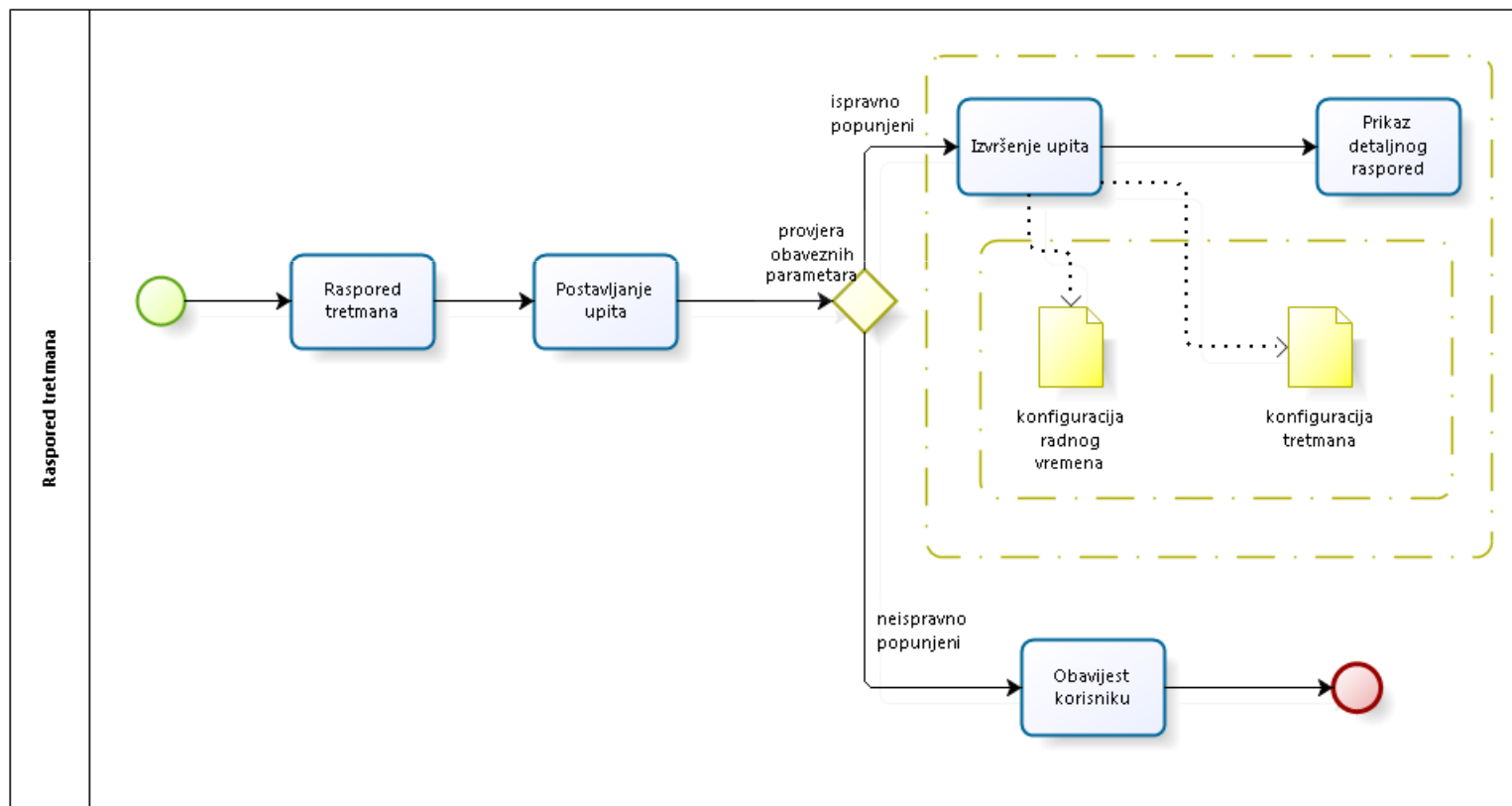
- ❖ af:column
- ❖ customChartContextMenu (na prikazu aktivnosti)
- ❖ customTableContextMenu (na resursu)
- ❖ major (dan), minor (15 minuta)
- ❖ nodeStamp



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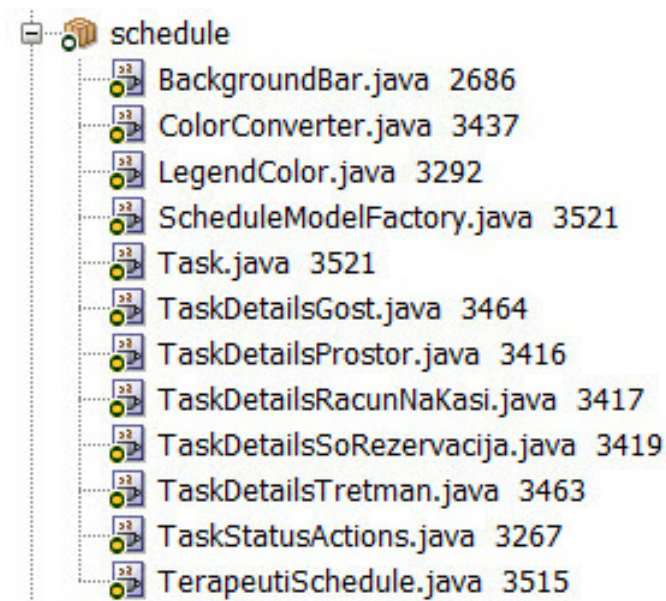
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Realizacija

- ❖ Prikaz rasporeda tretmana baziran je na VO koji se temelji na SQL statementu
- ❖ DataCollection za prikaz rasporeda nije realiziran direktno preko DataControle već je data model napravljen u java klasama
- ❖ ScheduleModelFactory.java upravlja operacijama vezanim za raspored tretmana

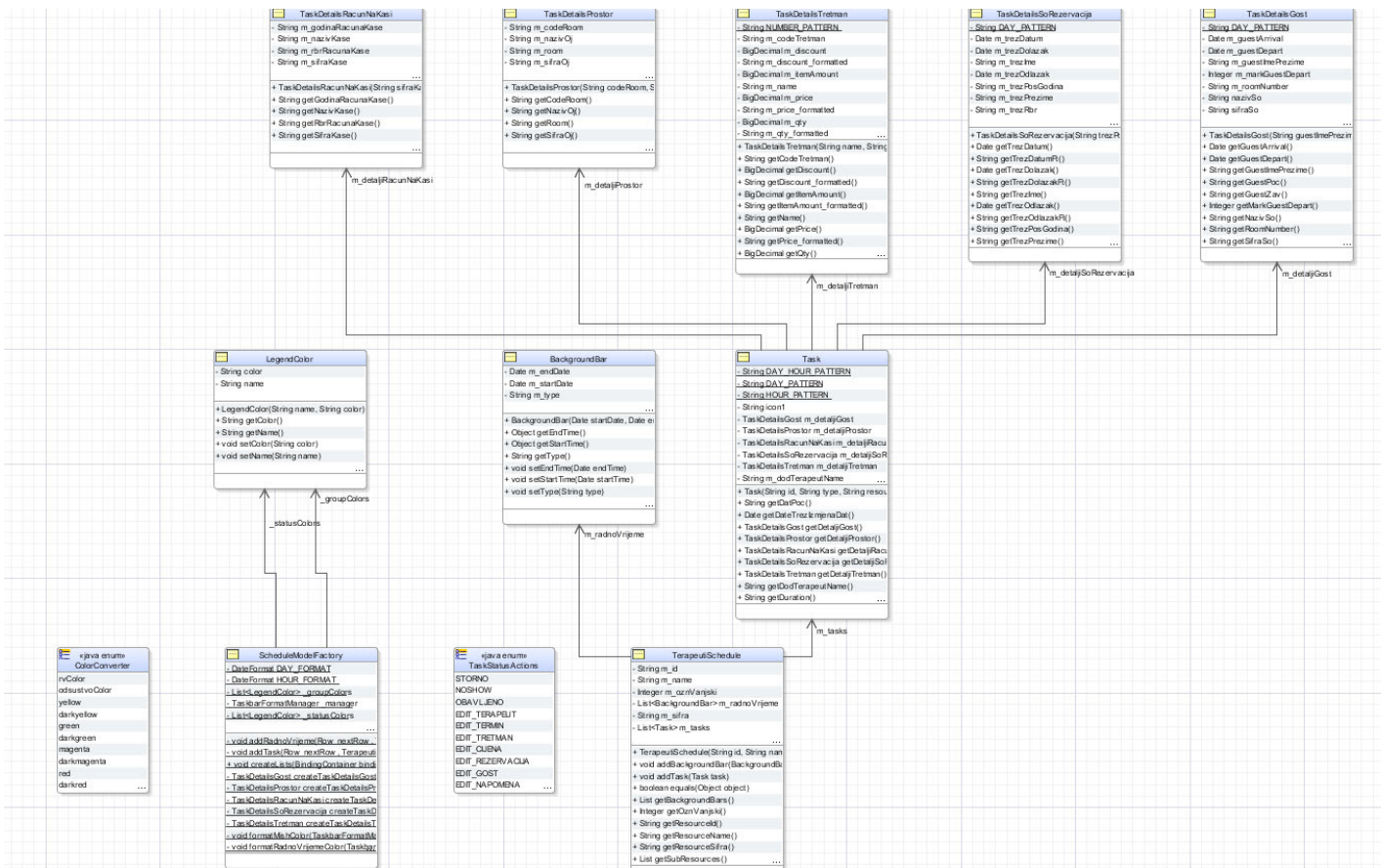


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Za ručni binding potrebno je realizirati :
`org.apache.myfaces.trinidad.model.TreeModel`

Moramo implementirati sljedeće attribute :

- ❖ `resourceId`
- ❖ `Tasks`

- ❖ `BackgroundBars`

```
public class TerapeutiSchedule {  
    private String m_id;  
    private String m_name;  
    private String m_sifra;  
    private Integer m_oznVanjski;  
  
    private List<Task> m_tasks;  
    private List<BackgroundBar> m_radnoVrijeme;  
  
    public TerapeutiSchedule(String id, String name, String sifra, Integer oznVanjski) {  
        m_id = id;  
        m_name = name;  
        m_sifra = sifra;  
        m_oznVanjski = oznVanjski;  
    }  
}
```



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Kolekcija objekata koja sadrži aktivnosti (Task) mora implementirati minimalno sljedeće atribute :

- ❖ taskId
- ❖ startTime
- ❖ endTime

```
public class Task {  
  
    private static final String HOUR_PATTERN = "HH:mm";  
    private static final String DAY_PATTERN = "dd.MM.yyyy";  
    private static final String DAY_HOUR_PATTERN = "dd.MM.yyyy HH:mm";  
  
    // id taska - id rezervacije  
    private String m_id;  
    // SatPoc - početak rada na tasku  
    private Date m_startDate;  
    // SatZav - kraj rada na tasku  
    private Date m_endDate;  
}
```



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Kolekcija objekata koja sadrži radno vrijeme (BackgroundBar) mora implementirati minimalno sljedeće atribute :

- ❖ startDate
- ❖ endDate

```
public class BackgroundBar {  
    private Date m_startDate;  
    private Date m_endDate;  
    private String m_type;  
  
    public BackgroundBar(Date startDate, Date endDate, String type)  
    {  
        m_startDate = startDate;  
        m_endDate = endDate;  
        m_type = type;  
    }  
}
```



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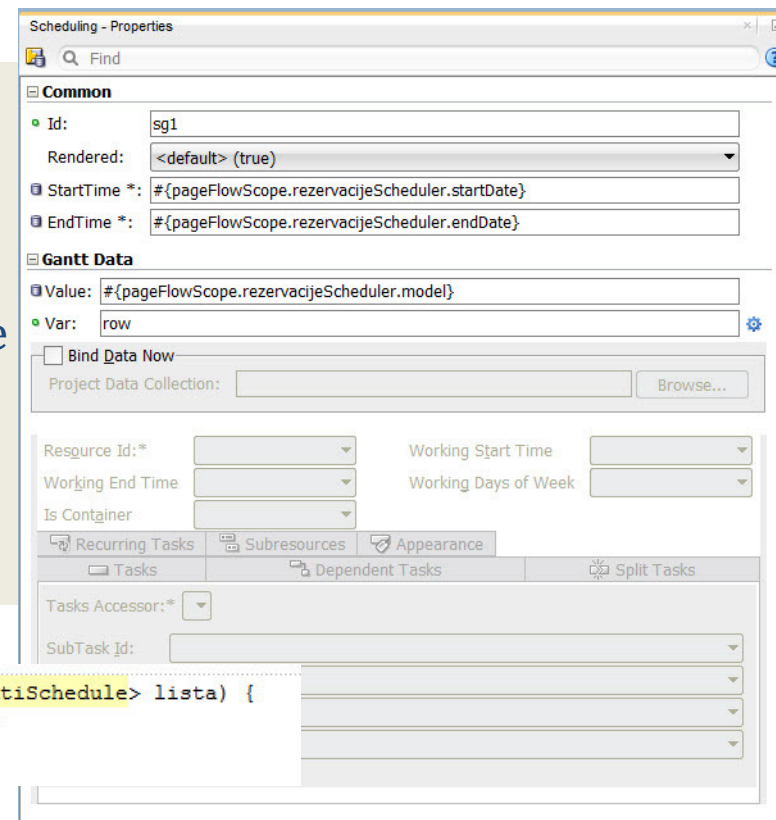
Mish Wellness – Scheduling Gantt

Napomene o „ručnom” bindingu

Ukoliko je po definiciji iz literature napravljen ispravan TreeModel, u runtime-u Scheduling Gantt prikazuje podatke i korisnik ne primjećuje radi li se o ručnom ili automatskom bindingu.

Osnovni podaci potrebni za prikaz scheduling Gantta pohranjeni su u pageFlowScope-u.

```
public static TreeModel radnoVrijemeTreeModelTerapeut(List<TerapeutiSchedule> lista) {  
    return radnoVrijemeTreeModel(lista, TimeAxis.SCALE_HALFHOURS);  
}
```



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Mish Wellness – Train

Zašto train model?

- ❖ Unos prilagođen korisniku – po grupama odnosno koracima
- ❖ S obzirom da je puno predviđenih podataka za unos, lakša je bila realizacija ekrana.
- ❖ Korake train modela iskoristili smo za skok kod izmjene podataka.



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Mish Wellness – Train (regija)

The screenshot displays a scheduling interface with a Gantt chart and a reservation modal. The Gantt chart shows a list of clients on the left and a time grid from 08:00 to 13:00 on the right. Reservations are shown as colored blocks: DEJAN PRINCE (10:00-10:30), DIANA PERKOVIĆ (11:00-11:30), ELENA VUČKOVIĆ (08:30-09:00), GORAN MIKIĆ (10:00-10:30), INES MOŠNJA, and KRISTINA ANAMARIA PERCAN P... (08:00-13:00). The modal window 'Rezervacija tretmana' is open, showing the following details:

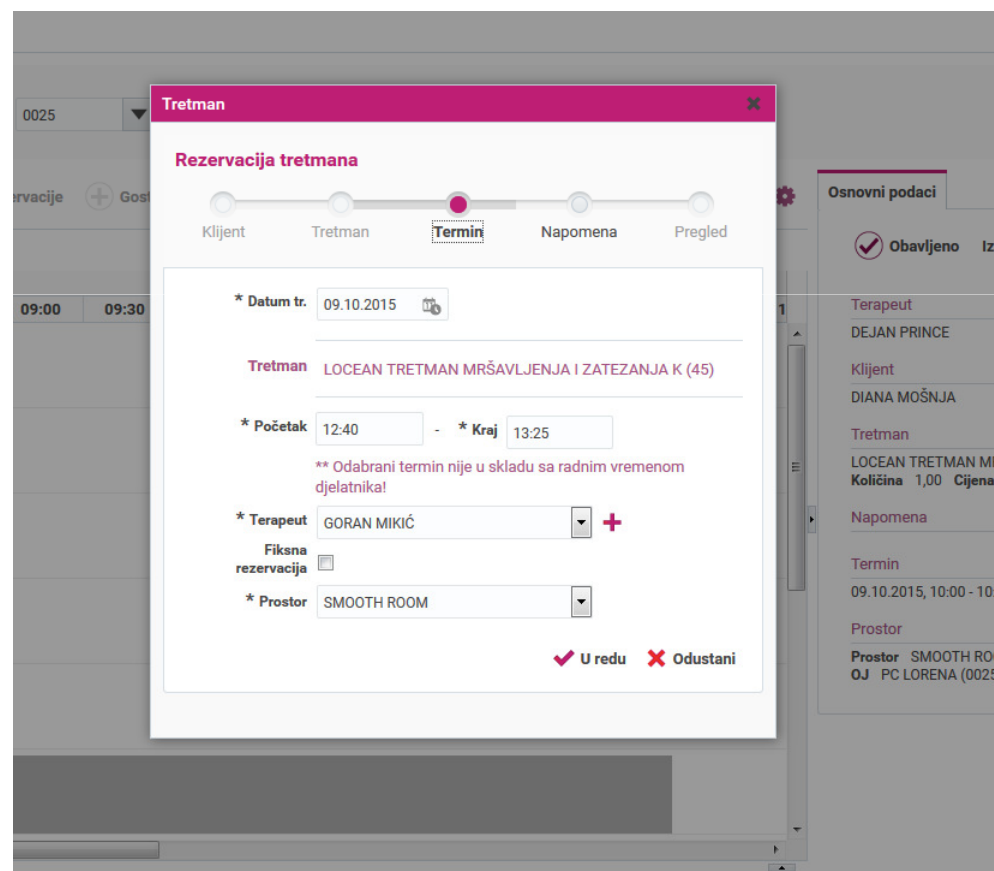
- Datum tr.:** 09.10.2015
- Tretman:** LOCEAN TRETMAN MRŠAVLJENJA I ZATEZANJA K (45)
- Početak:** 10:00 - **Kraj:** 10:45
- Terapeut:** DEJAN PRINCE
- Prostor:** SMOOTH ROOM
- Status:** U redu



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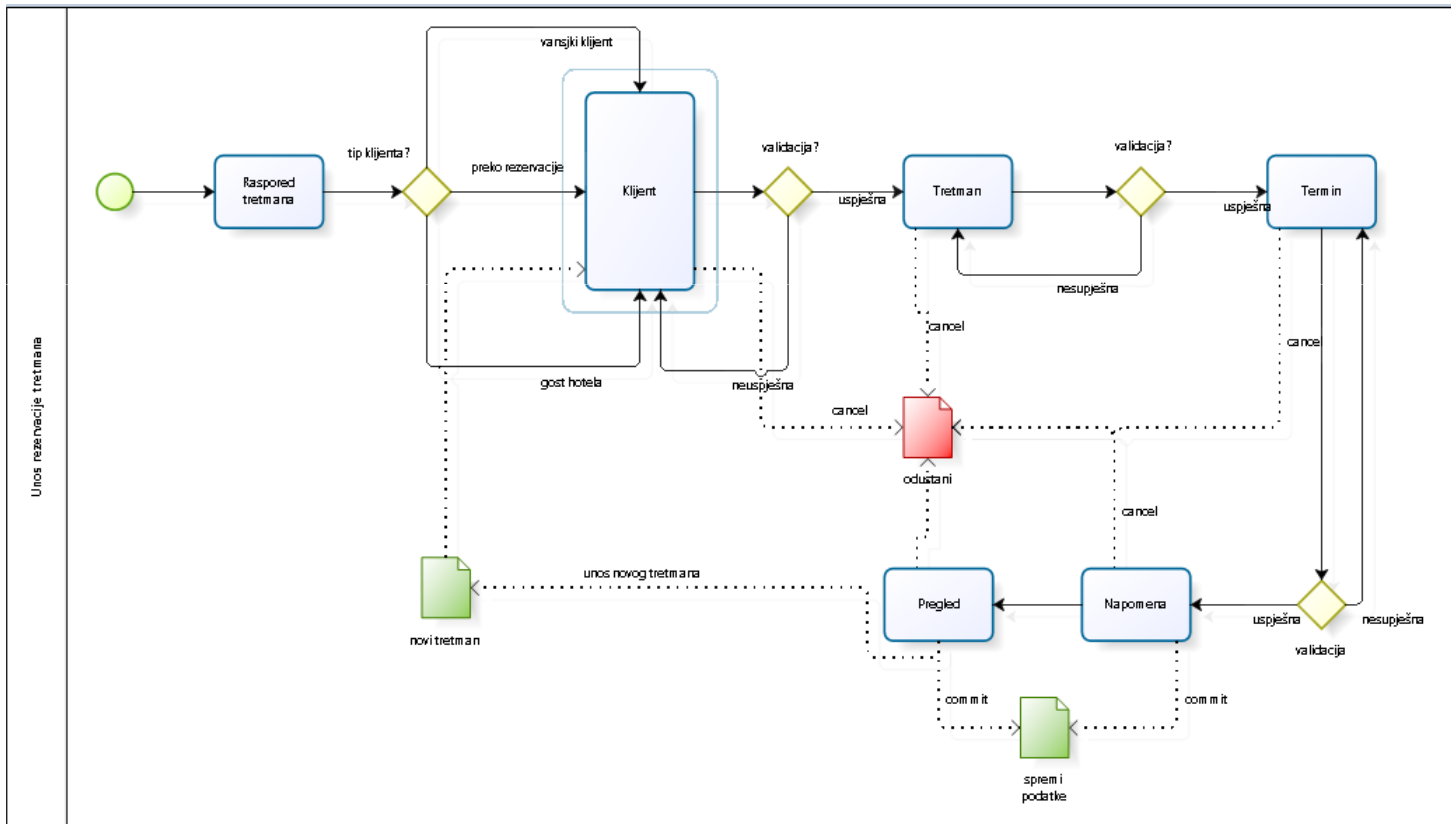
Mish Wellness – Train (popup)



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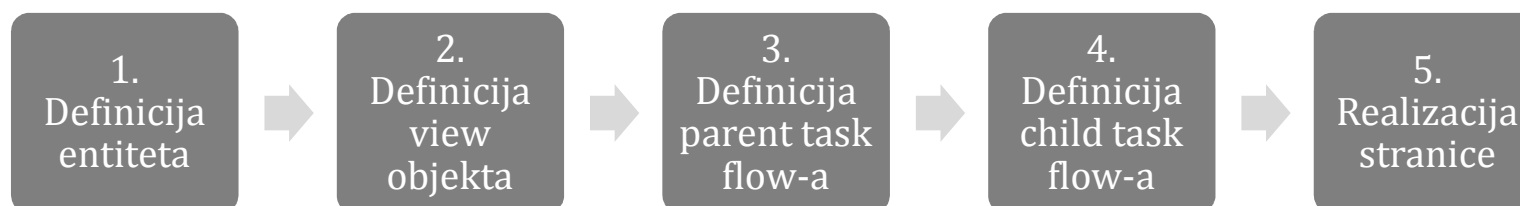
Mish Wellness – Train (proces)



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Tajne ADF Scheduling Gantta

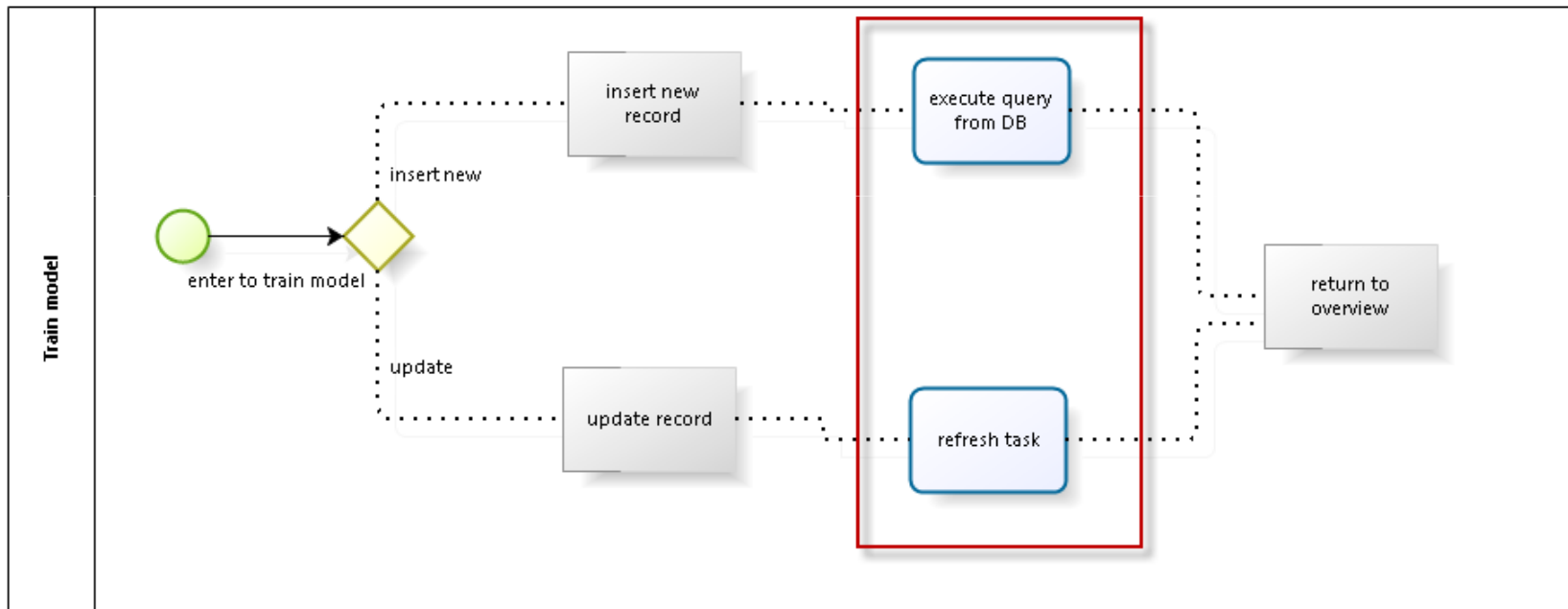
Mish Wellness – Train (realizacija)



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Mish Wellness – Train (pravilo osvježavanja)



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Mish Wellness – Train (VO)

Tuning

Enter tuning parameters for this View, to control SQL execution and how data is fetched from the database.

Retrieve from the Database

All Rows
 Only up to row number

in Batches of:

As Needed
 All at Once

At Most One Row

No Rows (i.e. used only for inserting new rows)

Query Optimizer Hint:

e.g FIRST_ROWS, ALL_ROWS, etc.

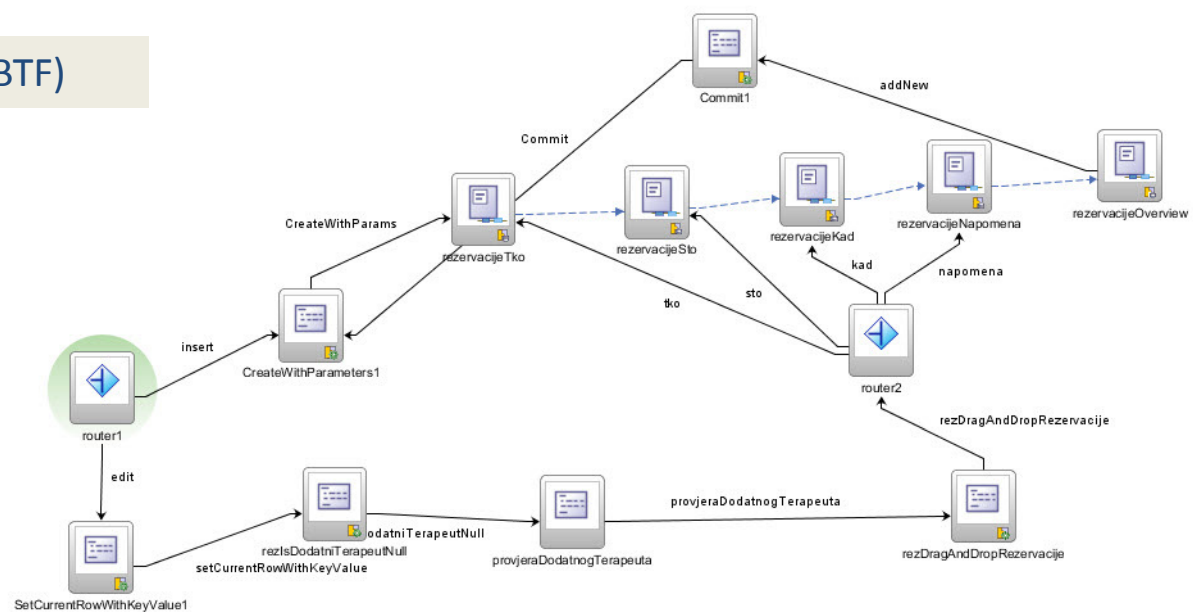
- ### View objekt
- ❖ Unos rezervacija radi preko VO koji je baziran na entitetima
 - ❖ Tuning opcija na VO prilagođena je unosu jednog po jednog sloga u bazu
 - ❖ Validacija je napisana u VORowImpl.java



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Mish Wellness – Train (BTF)



Task Flow

- ❖ Train model izdvojen je u BTF i funkcioniira samostalno
- ❖ SkipValidation na *.jsff koji sudjeluju u TrainModelu = True
- ❖ Napravljen parent – child BTF zbog mogućnosti unosa više tretmana za redom.



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Mish Wellness – Tuning VO

Zašto je tuning sekcija na VO važna?

- ❖ Tuniranjem VO može se značajno dobiti na brzini rada aplikacije.
- ❖ Važno je odvojiti: VO za preglede, VO za liste vrijednosti te VO koji služe za unos podataka
- ❖ Access Mode je važan kod komponenti gdje data collection realiziramo samostalno (u našem primjeru data collection za pregled rezervacija)



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Mish Wellness – Tuning VO

Unos / izmjena podataka

Pregled ili LOV

Tuning

Enter tuning parameters for this View, to control SQL execution and how data is retrieved from the database.

Retrieve from the Database

All Rows Only up to row number

in Batches of:

As Needed All at Once

At Most One Row

No Rows (i.e. used only for inserting new rows)

Query Optimizer Hint:

e.g FIRST_ROWS, ALL_ROWS, etc.

Tuning

Enter tuning parameters for this View, to control SQL execution and how data is retrieved from the database.

Retrieve from the Database

All Rows Only up to row number

in Batches of:

As Needed All at Once

At Most One Row

No Rows (i.e. used only for inserting new rows)

Query Optimizer Hint:

e.g FIRST_ROWS, ALL_ROWS, etc.



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Mish Wellness – Tuning VO

Scheduling Gantt

Tuning

Enter tuning parameters for this View, to control SQL execution and how data is fetched from the database.

Retrieve from the Database

All Rows Only up to row number

in Batches of:

As Needed All at Once

At Most One Row

No Rows (i.e. used only for inserting new rows)

Query Optimizer Hint:

e.g. FIRST_ROWS, ALL_ROWS, etc.

Fill Last Page of Rows when Paging through Rowset

Passivate State (e.g. Current Row, Bind Values, etc.)

Including All Transient Values

Access Mode:



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Mish Wellness – Korisničko sučelje

Prilagodba korisničkog sučelja

- ❖ Definiranje osnovnog skina aplikacije
- ❖ Definiranje paleta boja
- ❖ Izrada novih ikona
- ❖ Proširivanje altaSkin-a



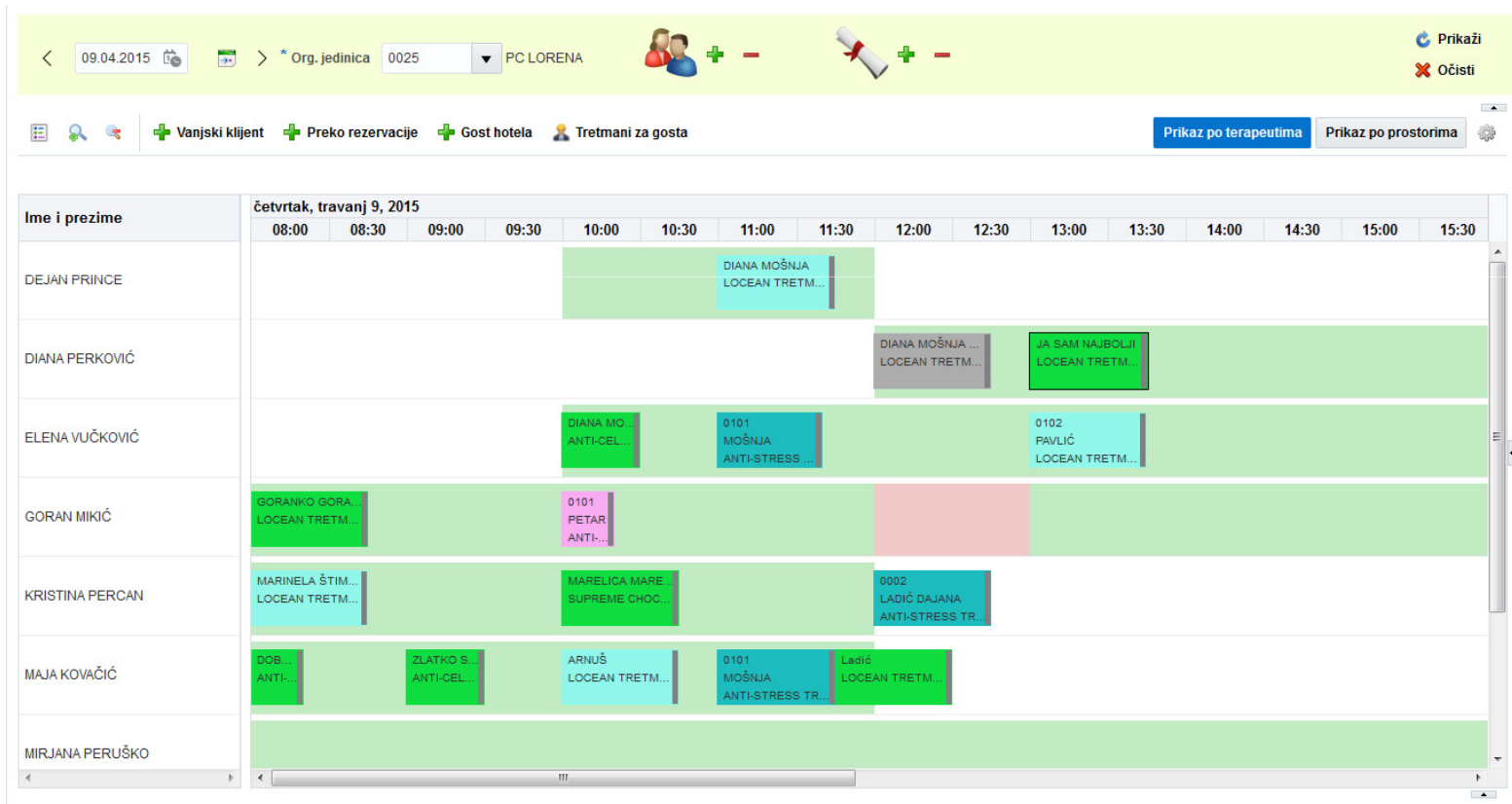
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Mish Wellness – Korisničko sučelje

BEFORE



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Mish Wellness – Korisničko sučelje

Mish Wellness

Korisničko ime

Lozinka

Schema

(e.g. localhost:1521.Oracle)

Prijava

06.07.2015 * Org. jedinica 0025 PC LORENA

7 12

Rezervacija tretmana

Klijent **Tretman** Termin Napomena Pregled

Upozorenje

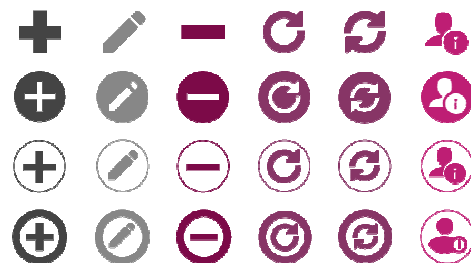
Želite li zatvoriti?
Sve nesprijmljene izmjene biti će odbačene.

Da Ne, povratak

HR HR
SI SI
EN EN

srpanj 2015

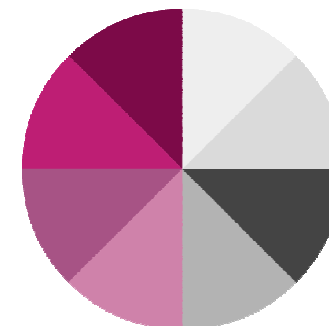
PON	UTO	SRI	ČET	PET	SUB	NED
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2



Grupe djelatnika (C) x Radno vrijeme x Djelatnici (C) x

Novi Izmjena Obriši Osvježi Tko?

Sifra	Naziv	Obavezan OIB	Napomena
VIZ	Vizažisti		
TER	Medicinski terap...		00d asd
ARO	Aroma-terapeuti	✓	
KOZ	Kozmetičar		
MAS	Masažeri		Napomena na masažerima dddd
PED	Pediker		
XX	xx		xx



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Mish Wellness – Korisničko sučelje

AFTER

Mish Wellness
ISTRA INFORMATIČKI INŽENJERING d.o.o. (I3hotel) Prijavi

Wellness | Pregled tretmana | Matični podaci

03.06.2015 * Org. jedinica: 0025 PC LORENA

Vanjski klijent | Preko rezervacije | Gost hotela | Tretmani za gosta Prikazi

Ime i prezime	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00	17:30	18:00	18:30
DEJAN PRINCE		dddd LOCEAN TRETM...						DIANA MOŠNJA LOCEAN TRETM...								9999 ANT...			DIANA MOŠNJA LOCEAN TRETM...
DIANA PERKOVIĆ		DIA... ANT...			DIANA PERKOVIĆ LOCEAN TRETM...							dddd LOCEAN TRETM...				DIA... ANT...			
ELENA VUČKOVIĆ					DAVOR BRENKO LOCEAN TRETM...					adasd LOCEAN TRETM...									
GORAN MIKIĆ								xxx LOCEAN TRETM...		DIANA MOŠNJA LOCEAN TRETM...		sdfdf LOCEAN ...							
INES MOŠNJA														sdfdfds SUPREME CHOC...				hfgfhg LOCEAN TRETM...	
KRISTINA ANAMARIA PERCAN P...												DIANA MOŠNJA LOCEAN TRETM...							
MAJA KOVAČIĆ																			



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Mish Wellness – Korisničko sučelje

```
.grid {
  background-color: #dadada;
  display: inline-block !important;
  position: absolute;
  width: 1px;
  height: 70px;
  margin: 0px;
  z-index: 1
}

function dodajGrid(compId) {
  var minorId = compId + "::minorAxis";
  var polja = document.getElementById(minorId).children; // satovi
  var ctx;
  var poz;
  var iDiv;
  var j = 0;

  // iterara se po redovima
  while (document.getElementById(compId + ":ctt:" + j + ":tsb") != null) {
    ctx = document.getElementById(compId + ":ctt:" + j + ":tsb"); //redovi
    // u svaki red postavlja se novi div (backgroundbar s klasom "grid") na poziciji pročitanoj iz polja sa satovima
    for (i = 0; i < polja.length; i++) {
      poz = polja[i].style.left;
      iDiv = document.createElement("div");
      iDiv.className = "grid";
      iDiv.style.left = poz;
      ctx.appendChild(iDiv);
    }
    // zadnji grid (pošto se gleda lijevi gornji kut, zadnji grid je potrebno naknadno postaviti)
    iDiv = document.createElement("div");
    iDiv.className = "grid";
    iDiv.style.left = lastGrid(polja[polja.length - 1].style.left, polja[polja.length - 1].style.width);
    ctx.appendChild(iDiv);
    j++;
  }
}
```

```
/**
 * poziv javascript funkcije za iscrtavanje grida
 * poziva se nakon svakog requesta
 * @param toogle - potrebna promjena vidljivosti grida
 */
public void toogleGrid(boolean toogle) {
  if (toogle) {
    getMyDataSession().setGridVisible(!getMyDataSession().isGridVisible());
  }

  String compId = getSchedule().getClientId();

  if (getMyDataSession().isGridVisible()) {
    // ...
  }
}
```

Vertikalni grid



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Scheduling Gantt - zaključak

Zaključak

- ❖ Potreba za naprednim grafičkim komponentama koje imaju mogućnost prikaza podataka iz baze podataka je velika
- ❖ Scheduling Gantt je solidna komponenta koja može drag and drop-om te automatskom vezom prema VO riješiti 80% problema korisnika
- ❖ Specifične zahtjeve potrebno je rješavati „ručno”



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Scheduling Gantt - zaključak

Zaključak

- ❖ Realizacija „ručnih“ dorada u slučaju aplikacije MisH Wellness pokazale su se ključnim zadatkom i komponenta je dobro odreagirala (nema blokiranja, radi brzo)
- ❖ Da bi se „ručno“ interveniralo na rad komponente potrebno je znanje Java, JavaScripta te CSS-a
- ❖ Literatura ima vrlo malo primjera koji mogu pomoći kod „ručnih dorada“



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Hvala na sudjelovanju uz srdačan pozdrav!

Diana Mošnja
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IstraTech d.o.o.
Pula

