

ACTIVITY PERTEMUAN 6

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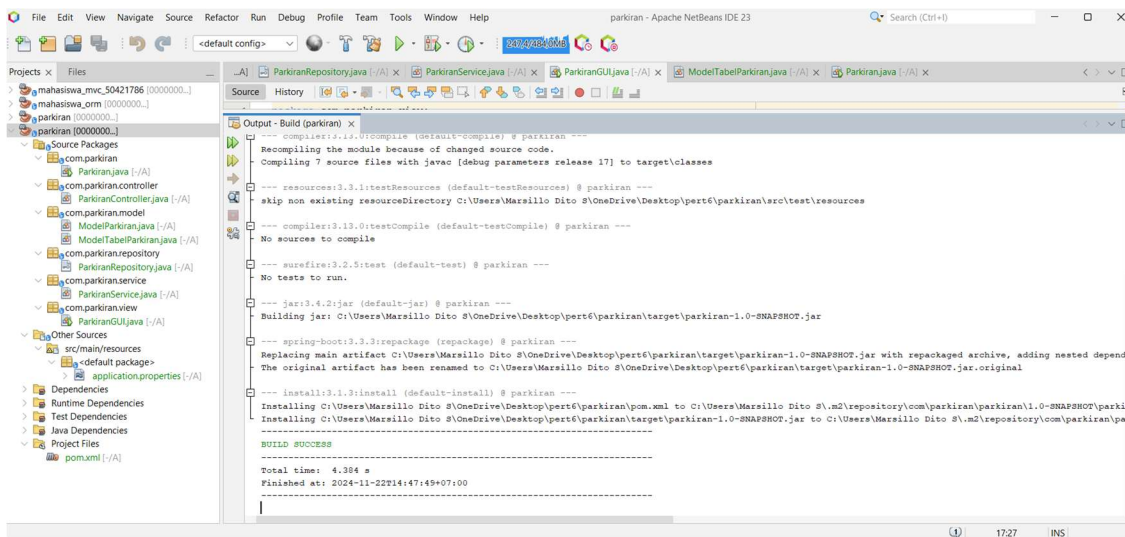
NPM : 50421786

KELAS : 4IA11

MATERI : Implementasi Dependency Injection pada Java Spring

MATA PRAKTIKUM : REKAYASA PERANGKAT LUNAK 2

(Screenshoot langkah-langkah sesuai video pembelajaran dan jelaskan dengan ringkas)



PROGRAM Pada ParkiranController

```
ParkiranController.java [-/A] x ParkiranRepository.java [-/A] x ParkiranService.java [-/A] x ParkiranGUI.java [-/A] x ModelTabelParkiran
Source History
1  /**
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
4   */
5   package com.parkiran.controller;
6
7   import com.parkiran.Parkiran;
8   import com.parkiran.model.ModelParkiran;
9   import com.parkiran.repository.ParkiranRepository;
10  import com.parkiran.service.ParkiranService;
11  import java.time.Duration;
12  import java.time.LocalDateTime;
13  import java.util.List;
14  import java.util.Optional;
15  import java.util.Scanner;
16  import org.springframework.beans.factory.annotation.Autowired;
17  import org.springframework.stereotype.Controller;
18
19  /**
20   *
21   * @author Marsillo Dito S
22   */
23
24  @Controller
25  public class ParkiranController {
26
27      @Autowired
28      private ParkiranService svc;
29
30  }
```

PROGRAM Pada ParkiranRepository

```
ParkiranController.java [-/A] x ParkiranRepository.java [-/A] x ParkiranService.java [-/A] x ParkiranGUI.java [-/A] x ModelTabelParkiran.java [-/A] x
Source History
1  /**
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
4   */
5   package com.parkiran.repository;
6
7   import com.parkiran.model.ModelParkiran;
8   import java.util.Optional;
9   import org.springframework.data.jpa.repository.JpaRepository;
10  import org.springframework.stereotype.Repository;
11
12  /**
13   *
14   * @author Marsillo Dito S
15   */
16
17  @Repository
18  public interface ParkiranRepository extends JpaRepository<ModelParkiran, Long>{
19      public Optional<ModelParkiran> findByPlatNomor(String platNomor);
20
21
22
23
24  }
25
```

PROGRAM Pada ParkiranService

```
ParkiranController.java [-/A] x ParkiranRepository.java [-/A] x ParkiranService.java [-/A] x ParkiranGUI.java [-/A] x ModelTabelParkiran.java [-/A] x
Source History
22  private ParkiranRepository repo;
23  public void masukParkir (ModelParkiran park) {
24      repo.save (park);
25  }
26
27  public String keluarParkir (String platNomor) {
28      // Cari data parkir berdasarkan plat nomor
29      Optional<ModelParkiran> optionalParkiran = repo.findByPlatNomor (platNomor);
30
31      // Jika data parkir ditemukan
32      if (optionalParkiran.isPresent()) {
33          ModelParkiran parkiran = optionalParkiran.get();
34          LocalDateTime waktuKeluar = LocalDateTime.now();
35
36          // Hitung durasi parkir
37          Duration durasi = Duration.between(parkiran.getWaktuMasuk(), waktuKeluar);
38          long jamParkir = durasi.toHours();
39          if (durasi.toMinutesPart() > 0) {
40              jamParkir++; // Pembulatan ke atas jika ada menit lebih
41          }
42          //menambah jenis kendaraan
43          //String jenisKendaraan = parkiran.getJenisKendaraan() == 1 ? "Motor" : "Mobil";
44          // Hitung biaya parkir
45          int tarifPerJam = (parkiran.getJenisKendaraan() == 1) ? 5000 : 10000;
46          long totalBiaya = jamParkir * tarifPerJam;
47          String total = totalBiaya + "";
48          repo.delete(parkiran);
49          return total;
50
51      } else {
52          return "Kendaraan dengan plat nomor " + platNomor + " tidak ditemukan.";
53      }
54  }
55
56  public List<ModelParkiran> getAllParkiran() {
57      return repo.findAll();
58  }
```

PROGRAM Pada ParkiranGUI

```
ParkiranController.java [-/A] x ParkiranRepository.java [-/A] x ParkiranService.java [-/A] x ParkiranGUI.java [-/A] x ModelTabelP...
Source History
38 // Main layout
39 setLayout(new BorderLayout());
40
41 // Panel for form input
42 JPanel formPanel = new JPanel(new GridLayout(6, 2, 5, 5));
43 JLabel platNomorLabel = new JLabel("Plat Nomor:");
44 platNomorField = new JTextField();
45 formPanel.add(platNomorLabel);
46 formPanel.add(platNomorField);
47
48 JLabel jenisKendaraanLabel = new JLabel("Jenis Kendaraan:");
49 motorRadioButton = new JRadioButton("Motor");
50 mobilRadioButton = new JRadioButton("Mobil");
51
52 ButtonGroup kendaraanGroup = new ButtonGroup();
53 kendaraanGroup.add(motorRadioButton);
54 kendaraanGroup.add(mobilRadioButton);
55
56 formPanel.add(jenisKendaraanLabel);
57 JPanel radioPanel = new JPanel(new FlowLayout(FlowLayout.LEFT));
58 radioPanel.add(motorRadioButton);
59 radioPanel.add(mobilRadioButton);
60 formPanel.add(radioPanel);
61
62 masukButton = new JButton("Masuk");
63 keluarButton = new JButton("Keluar");
64
65 JLabel platKeluarLabel = new JLabel("Plat Nomor Keluar:");
66 platKeluarField = new JTextField();
67 formPanel.add(platKeluarLabel);
68 formPanel.add(platKeluarField);
69 formPanel.add(masukButton);
70 formPanel.add(keluarButton);
71
72 add(formPanel, BorderLayout.NORTH);
73
74 // Table for displaying parkiran data
```

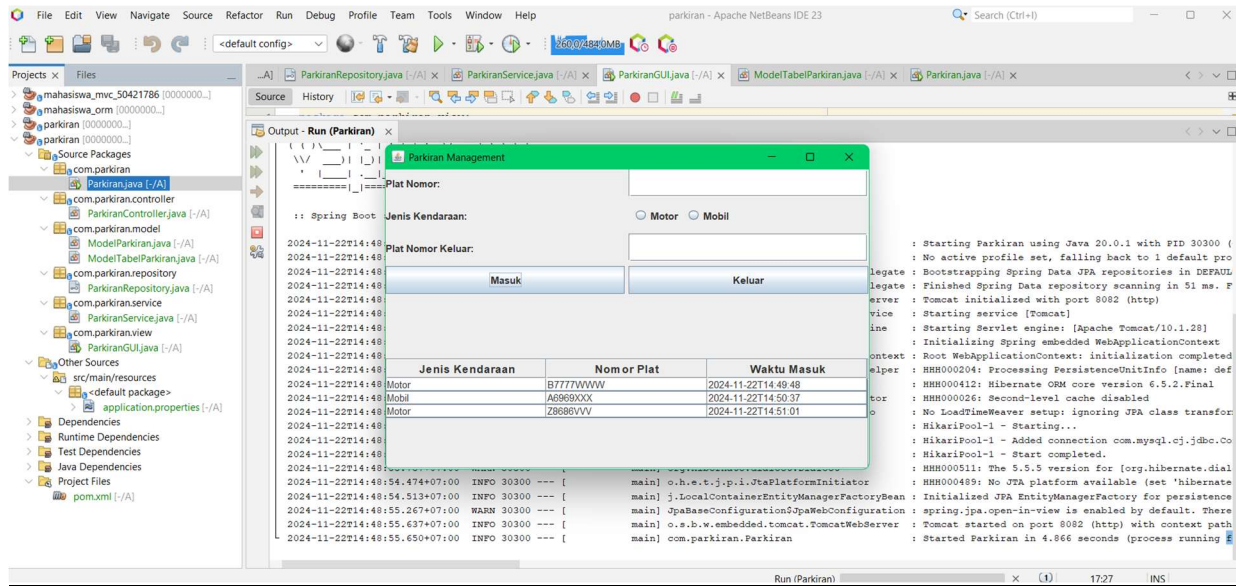
PROGRAM Pada ModelTabelParkiran

```
ParkiranController.java [-/A] x ParkiranRepository.java [-/A] x ParkiranService.java [-/A] x ParkiranGUI.java [-/A] x ModelTabelParkiran.java [-/A] x
Source History
10 /**
11  *
12  * @author Marsillo Dito S
13  */
14
15 public class ModelTabelParkiran extends AbstractTableModel {
16     private List<ModelParkiran> parkiranList;
17     private String[] columnNames = {"Jenis Kendaraan", "Nomor Plat", "Waktu Masuk"};
18     public ModelTabelParkiran(List<ModelParkiran> parkiranList) {
19         this.parkiranList = parkiranList;
20     }
21     @Override
22     public int getRowCount() {
23         return parkiranList.size();
24     }
25 }
26
27 @Override
28 public int getColumnCount() {
29     return columnNames.length;
30 }
31
32
33 @Override
34 public Object getValueAt(int rowIndex, int columnIndex) {
35     ModelParkiran parkiran = parkiranList.get(rowIndex);
36     switch (columnIndex) {
37         case 0:
38             int jenis = parkiran.getJenisKendaraan();
39             String jenis_kendaraan;
40             if (jenis == 1) {
41                 jenis_kendaraan = "Motor";
42             } else {
43                 jenis_kendaraan = "Mobil";
44             }
45             return jenis_kendaraan;
46         case 1:
47             return parkiran.getPlatNomor();
48     }
49 }
```

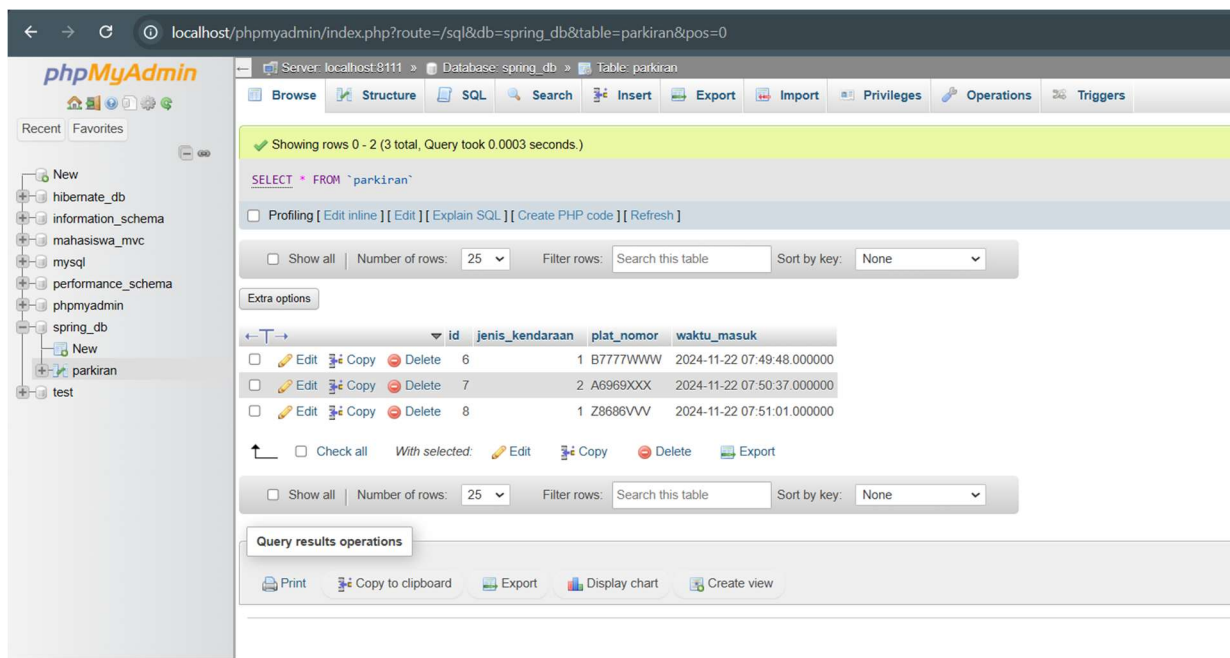
PROGRAM Pada Parkiran

```
Source History
1  /**
2   * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
3   */
4
5   package com.parkiran;
6
7   import com.parkiran.controller.ParkiranController;
8   import com.parkiran.view.ParkiranGUI;
9   import org.springframework.beans.factory.annotation.Autowired;
10  import org.springframework.boot.ApplicationArguments;
11  import org.springframework.boot.ApplicationRunner;
12  import org.springframework.boot.CommandLineRunner;
13  import org.springframework.boot.SpringApplication;
14  import org.springframework.boot.autoconfigure.SpringBootApplication;
15  import org.springframework.context.ApplicationContext;
16
17  /**
18   *
19   * @author Arsilio Bito S
20   */
21
22  @SpringBootApplication
23  public class Parkiran implements ApplicationRunner{
24      @Autowired
25      private ParkiranController parkController;
26
27      public static void main(String[] args) {
28          System.setProperty("java.awt.headless", "false");
29          ApplicationContext ctx = SpringApplication.run(Parkiran.class, args);
30          ParkiranController controller = ctx.getBean(ParkiranController.class);
31          ParkiranGUI park = new ParkiranGUI(controller);
32          park.setVisible(true);
33      }
34  }
```

OUTPUT KENDARAAN BERHASIL MASUK



DATABASE WAKTU PARKIR KENDARAAN SAAT MASUK PARKIRAN



localhost/phpmyadmin/index.php?route=/sql&db=spring_db&table=parkiran&pos=0

Server: localhost:8111 » Database: spring_db » Table: parkiran

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

1 row affected.

```
UPDATE `parkiran` SET `waktu_masuk` = '2024-11-22 05:51:01.000000' WHERE `parkiran`.`id` = 8;
```

[Edit inline] [Edit] [Create PHP code]

Showing rows 0 - 2 (3 total, Query took 0.0002 seconds.)

```
SELECT * FROM `parkiran`
```

☐ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	id	jenis_kendaraan	plat_nomor	waktu_masuk
<input type="checkbox"/>	6	1	B7777WWW	2024-11-22 06:49:48.000000
<input type="checkbox"/>	7	2	A6969XXX	2024-11-22 05:50:37.000000
<input type="checkbox"/>	8	1	Z8686VVV	2024-11-22 05:51:01.000000

☐ Check all | With selected: ☐ Edit ☐ Copy ☐ Delete ☐ Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

☐ Print ☐ Copy to clipboard ☐ Export ☐ Display chart ☐ Create view

OUTPUT KENDARAAN BERHASIL KELUAR

parkiran - Apache NetBeans IDE 23

Source History Output Run (Parkiran) x

Plat Nomor: B7777WWW

Jenis Kendaraan: Motor Mobil

Masuk Keluar

Jenis Kendaraan	Nomor Plat	Waktu Masuk
Motor	B7777WWW	2024-11-22T14:49:48
Mobil	A6969XXX	2024-11-22T14:50:37
Motor	Z8686VVV	2024-11-22T14:51:01

Success

Biaya Parkir: Rp 10000

OK

0.0.1 with PID 30300 (back to 1 default repositories in DEFAULT scanning in 51 ms. F082 (http)

Starting Servlet engine: [Apache Tomcat/10.1.28]

Initializing Spring embedded WebApplicationContext

Root WebApplicationContext: initialization completed

elper : HHN000204: Processing PersistenceUnitInfo [name: def

tor : HHN000412: Hibernate ORM core version 6.5.2.Final

tor : HHN000026: Second-level cache disabled

o : No LoadTimeWeaver setup: ignoring JPA class transfor

: HikariPool-1 - Starting...

: HikariPool-1 - Added connection com.mysql.cj.jdbc.Co

: HikariPool-1 - Start completed.

: HHN000511: The 5.5.5 version for [org.hibernate.dial

: HHN000489: No JPA platform available (set 'hibernate

: Initialized JPA EntityManagerFactory for persistence

: spring.jpa.open-in-view is enabled by default. There

: Tomcat started on port 8082 (http) with context path

: Started Parkiran in 4.866 seconds (process running

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

parkiran - Apache NetBeans IDE 23

Search (Ctrl+I)

Projects x Files

- mahasiswa_mvc_50421786 [00000000...]
- mahasiswa_orm [00000000...]
- parkiran [00000000...]
- parkiran [00000000...]
- Source Packages
 - com.parkiran
 - Parkiran.java [~/A]
 - com.parkiran.controller
 - ParkiranController.java [~/A]
 - com.parkiran.model
 - ModelParkiran.java [~/A]
 - ModelTabelParkiran.java [~/A]
 - com.parkiran.repository
 - ParkiranRepository.java [~/A]
 - com.parkiran.service
 - ParkiranService.java [~/A]
 - com.parkiran.view
 - ParkiranGUI.java [~/A]
 - Other Sources
 - src/main/resources
 - <default package>
 - application.properties [~/A]
 - Dependencies
 - Runtime Dependencies
 - Test Dependencies
 - Java Dependencies
 - Project Files
 - pom.xml [~/A]

Output - Run (Parkiran) x

Parkiran Management

Plat Nomor: [A6969XXX]

Jenis Kendaraan: ☐ Motor ☒ Mobil

Plat Nomor Keluar: [A6969XXX]

Masuk Keluar

Jenis Kendaraan	Nom or Plat	Waktu Masuk
Mobil	A6969XXX	2024-11-22T12:50:37
Motor	Z8688VVV	2024-11-22T12:51:01

Success

Biaya Parkir: Rp 30000

OK

Run (Parkiran) x (1) 17:27 INS

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

parkiran - Apache NetBeans IDE 23

Search (Ctrl+I)

Projects x Files

- mahasiswa_mvc_50421786 [00000000...]
- mahasiswa_orm [00000000...]
- parkiran [00000000...]
- parkiran [00000000...]
- Source Packages
 - com.parkiran
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 - ModelTabelParkiran.java [~/A]
 - com.parkiran.repository
 - ParkiranRepository.java [~/A]
 - com.parkiran.service
 - ParkiranService.java [~/A]
 - com.parkiran.view
 - ParkiranGUI.java [~/A]
 - Other Sources
 - src/main/resources
 - <default package>
 - application.properties [~/A]
 - Dependencies
 - Runtime Dependencies
 - Test Dependencies
 - Java Dependencies
 - Project Files
 - pom.xml [~/A]

Output - Run (Parkiran) x

Parkiran Management

Plat Nomor: [Z8688VVV]

Jenis Kendaraan: ☒ Motor ☐ Mobil

Plat Nomor Keluar: [Z8688VVV]

Masuk Keluar

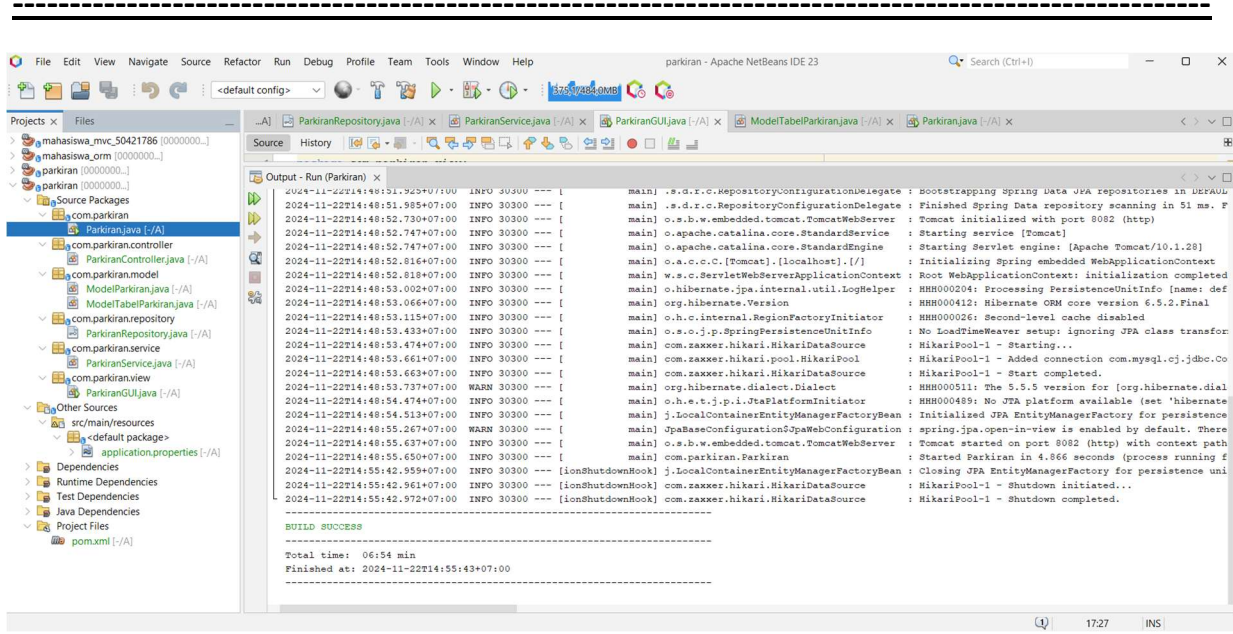
Jenis Kendaraan	Nom or Plat	Waktu Masuk
Motor	Z8688VVV	2024-11-22T12:51:01

Success

Biaya Parkir: Rp 15000

OK

Run (Parkiran) x (1) 17:27 INS



JUDUL LAGU (nilai tambahan +)

OTR, Au/Ra - Broken

