

README

GitHub for code: [payslip4seisma](#)

Demo on AWS : <http://payslip-env.eba-wbzk622x.us-east-2.elasticbeanstalk.com/csvServlet>

README.txt

Java version: 11

IDE: IntelliJ IDEA

Tomcat server:9.0.46

Maven: 3.8.1

Instruction to use the app(2 ways):

Option 1: (Regardless of web view)

1. Download the zip file named "payslip4seisma"
2. Open the project from "File" -> "Open Project"
3. "Add Configuration"
4. Choose "Application" and add to Configuration
5. Right-Click on "Run Test.main()"

Option 2:

1. Download and configure Java JDK 11.
2. Download and configure tomcat 9.0.46
3. Download and install maven 3.8.1
4. Run tomcat after adding dependencies in step 5;
5. Add dependencies to POM.xml(ignore maven plugin if you don't need .war):

```
<build>
```

```
...
```

```
  <plugins>
```

```
    <plugin>
```

```
      <groupId>org.apache.maven.plugins</groupId>
```

```
      <artifactId>maven-war-plugin</artifactId>
```

```
      <version>3.3.0</version>
```

```
    </plugin>
```

```
  </plugins>
```

```
</build>
```

```
<dependencies>
```

```
  <dependency>
```

```

    <groupId>javax.servlet</groupId>
    <artifactId>javax.servlet-api</artifactId>
    <version>4.0.1</version>
    <scope>provided</scope>
  </dependency>
</dependencies>

```

Assumptions:

1. Input is in CSV format.
2. The sequence is first name, last name, annual salary, super rate (%), payment start date.
3. The year is 2021.

Design:

1. index.jsp
2. CSVservlet
3. CSV
 1. validate
 1. yes -> parse to Employee
 1. no empty
 2. not nonsense
 3. convert to right format (to int or float or date)
 2. no -> index.jsp
4. Employee
 1. calculate -> parse to PaySlip
5. PaySlip
 1. print

Testing Report:

Input	Output	Remark
Monica,Tan,60050,9%,1 March	Monica Tan,01 March - 31 March,5004,922,4082,450	
,Tan,60050,9%,1 March	First Name cannot be empty.	
Monica,,60050,9%,1 Mar	Last Name cannot be empty.	
Monica,Tan,,9%,1 March	Annual Salary cannot be empty.	

Monica,Tan,60050,,1 March	Super Rate cannot be empty.	
Monica,Tan,60050,9%,	Invalid csv record. Valid csv record has 5 items separated by comma	
Monica,Tan,60050,0.09,1 Mar	Monica Tan,01 March - 31 March,5004,922,4082,450	Super Rate accepts float
Monica,Tan,60050,51%,1 Mar	Super Rate: Cannot be over 50%.	Super Rate is between 0 and 50% inclusive.
Monica,Tan,60050,-9%,1 Mar	Super Rate: Cannot be negative number.	
Monica,Tan,60050,9%,1 Mar	Monica Tan,01 March - 31 March,5004,922,4082,450	Format start date and end date to the same length
Monica,Tan,60050,9%,1 Marhk	Payment Start Date: the spelling of month is incorrect.	
Monica,Tan,60050,9%,29 Feb	Payment Start Date: the day of this month cannot be over 28.	