

# Freelance Job Manager Backend

Bogdan A. Constantin

May 12, 2016

## Contents

<b>1</b>	<b>Installing and Running the Server</b>	<b>3</b>
<b>2</b>	<b>Updating the Server</b>	<b>3</b>
<b>3</b>	<b>Method Reference</b>	<b>3</b>
3.1	Session Methods . . . . .	3
3.1.1	Login . . . . .	3
3.2	User Methods . . . . .	4
3.2.1	User Registration . . . . .	4
3.2.2	Read User . . . . .	4
3.2.3	Update user . . . . .	4
3.2.4	List Users . . . . .	4
3.2.5	User Update . . . . .	5
3.2.6	Delete User . . . . .	5
3.3	Freelancer Methods . . . . .	5
3.3.1	Freelancer Registration . . . . .	5
3.3.2	Update Freelancer . . . . .	6
3.3.3	Read Freelancer . . . . .	6
3.3.4	List Freelancers . . . . .	6
3.3.5	Delete Freelancer . . . . .	6
3.4	JobType Methods . . . . .	7
3.4.1	Create Job Type . . . . .	7
3.4.2	Update Job Type . . . . .	7
3.4.3	Read Job Type . . . . .	7
3.4.4	List Job Types . . . . .	7
3.4.5	Delete Job Type . . . . .	7
3.5	Location Methods . . . . .	8
3.5.1	Create Location . . . . .	8

3.5.2	Update Location . . . . .	8
3.5.3	Read Location . . . . .	8
3.5.4	List Locations . . . . .	8
3.5.5	Delete Location . . . . .	9
3.6	Job Methods . . . . .	9
3.6.1	Job Statuses . . . . .	9
3.6.2	Create Job Request . . . . .	9
3.6.3	Update Job Request . . . . .	9
3.6.4	Delete Job Request . . . . .	9
3.6.5	Read Job . . . . .	9
3.6.6	List User Jobs by Status . . . . .	9
3.6.7	List Freelancer Jobs by Status . . . . .	10
3.6.8	List Open Jobs by JobType . . . . .	10
3.6.9	List Open Jobs by JobType and Location Area . . . . .	10
3.6.10	Request payment . . . . .	10
3.7	Subscription Methods . . . . .	11
3.7.1	Subscribe / Update subscription . . . . .	11
3.7.2	Accept subscription . . . . .	11
3.7.3	Delete subscription . . . . .	11
3.7.4	List Job subscriptions . . . . .	11
3.7.5	List Freelancer Subscriptions . . . . .	12

# 1 Installing and Running the Server

- Unzip the archive (don't create a new folder)
- cd into the FreeJobServer directory
- Run start.bat. java.exe must be installed and on the path. If not, please edit start.bat and use the full java.exe path.

# 2 Updating the Server

- To stop the server enter **stop 0** on the console and then press ENTER.
- Unpack the update archive into the /bundle directory.
- Delete **felix-cache** directory
- Restart the server

# 3 Method Reference

The REST servlet is accessible at the following URL: localhost:48080/freejob  
Each method URL must be prefixed with this string.

## 3.1 Session Methods

### 3.1.1 Login

**POST /sessions/login** Login as a customer or freelancer. Sample payload for customer login:

```
{
  "role" : "CUSTOMER",
  "email" : "johndoe.constantin@itsix.com",
  "password" : "mypassword"
}
```

**RESPONSE** Sample for a customer login.

```
{
  "data": {
    "sessionId": "e8599496-7099-41b7-a554-65dfd38e02f2",

```

```

    "user": {
      "id": "5a6a7a5b-a66c-4cb8-bc61-14dea633a8ca",
      "firstName": "John",
      "lastName": "Doe ITSIX",
      "email": "johndoe.constantin@itsix.com",
      "role": "CUSTOMER",
      "password": null
    },
    "created": 1461337503669
  },
  "success": true,
  "message": null
}

```

## 3.2 User Methods

### 3.2.1 User Registration

**POST /users/register** Register a new user. Sample payload:

```

{
  "firstName" : "John",
  "lastName" : "Doe",
  "email" : "johndoe@example.org",
  "password" : "mypassword",
}

```

### 3.2.2 Read User

**GET /users/{userId}** Read user.

### 3.2.3 Update user

**POST /users** Update user data

### 3.2.4 List Users

**GET /users** List all users. Sample response:

```

{
  "data": [
    {
      "id": "5fd2124b-3cf9-434a-97df-5b0af469a9f2",

```

```

        "firstName": "John",
        "lastName": "Doe",
        "email": "johndoe@example.org",
        "role": "USER",
        "password": null
    }
],
"success": true,
"message": null
}

```

### 3.2.5 User Update

**POST /users** Update user data. If id is null, a new user is created.  
Payload:

```

{
  "id": "5fd2124b-3cf9-434a-97df-5b0af469a9f2",
  "firstName": "John",
  "lastName": "Doe",
  "email": "johndoe@example.org",
  "role": "USER",
  "password": null
}

```

### 3.2.6 Delete User

**DELETE /users/{userId}** Delete a user.

## 3.3 Freelancer Methods

### 3.3.1 Freelancer Registration

**POST /freelancers/register** Register a new freelancer. Sample payload:

```

{
  "jobTypeId": "60243132-4316-4400-86aa-7b17c866584b",
  "firstName": "John",
  "lastName": "Doe",
  "email": "johndoe@example.org",
  "password": "some password",
}

```

### 3.3.2 Update Freelancer

**POST** /freelancers Update freelancer

### 3.3.3 Read Freelancer

**GET** /freelancers/{freelancerId} Read freelancer.

### 3.3.4 List Freelancers

**GET** /freelancers List all freelancers. Sample response:

```
{
  "data": [
    {
      "id": "baf538a8-fbbe-4bdf-bc83-7819f60b0d62",
      "jobTypeId": "60243132-4316-4400-86aa-7b17c866584b",
      "firstName": "John",
      "lastName": "Doe",
      "email": "johndoe@example.org",
      "password": null,
      "address": null,
      "latitude": null,
      "longitude": null,
      "city": null,
      "county": null,
      "avgRating": 0,
      "bankName": null,
      "accountNumber": null
    }
  ],
  "success": true,
  "message": null
}
```

### 3.3.5 Delete Freelancer

**DELETE** /freelancers/{freelancerId} Delete a freelancer.

## 3.4 JobType Methods

### 3.4.1 Create Job Type

**POST** /jobtypes Create a new job type. Sample payload:

```
{
  "name" : "Baby-Sitter",
  "description" : "Takes care of babies",
  "commission": 2.5
}
```

### 3.4.2 Update Job Type

**POST** /jobtypes

### 3.4.3 Read Job Type

**GET** /jobtypes/{jobTypeId} Read job type.

### 3.4.4 List Job Types

**GET** /jobtypes List all job types. Sample response:

```
{
  "data": [
    {
      "id": "60243132-4316-4400-86aa-7b17c866584b",
      "name": "Baby-Sitter",
      "description": "Takes care of babies",
      "commission" : 2.5
    }
  ],
  "success": true,
  "message": null
}
```

### 3.4.5 Delete Job Type

**DELETE** /jobtypes/{jobTypeId} Delete a job type.

## 3.5 Location Methods

### 3.5.1 Create Location

**POST** /users/{userId}/locations Create a new location for a user.

Sample payload:

```
{
  "name" : "Home",
  "address" : "Sesame Street 15",
  "city" : "Pielesti",
  "county" : "Dolj",
  "latitude" : 45.318266,
  "longitude" : 24.825482
}
```

### 3.5.2 Update Location

**POST** /users/{userId}/locations

### 3.5.3 Read Location

**GET** /users/{userId}/locations/{locationId} Read a location.

### 3.5.4 List Locations

**GET** /users/{userId}/locations List all locations of a user. Sample response:

```
{
  "data": [
    {
      "id": "364b5a88-6ebe-43da-8ebb-0035e1305d5a",
      "name" : "Home",
      "userId": "5a6a7a5b-a66c-4cb8-bc61-14dea633a8ca",
      "address": "Sesame Street 15",
      "city": "Pielesti",
      "county": "Dolj",
      "latitude": 45.318266,
      "longitude": 24.825482
    }
  ],
  "success": true,
}
```



```
  "message": null
}
```

### 3.5.5 Delete Location

**DELETE** /users/{userId}/locations/{locationId} Delete a location for a user.

## 3.6 Job Methods

### 3.6.1 Job Statuses

**Valid Job statuses are** OPEN, ACCEPTED, ONGOING, FINISHED, PAYMENT\_REQUESTED, BILLED, CANCELLED

### 3.6.2 Create Job Request

**POST** /users/{userId}/jobs Create a new job request for a user. Sample payload:

```
{
  "title" : "Baby sitter request",
  "description" : "Need baby sitter for a 5 yr old.",
  "jobTypeId" : "e0d136eb-8e33-426d-aef3-a66ce5c668de",
  "locationId" : "364b5a88-6ebe-43da-8ebb-0035e1305d5a"
}
```

### 3.6.3 Update Job Request

**POST** /users/{userId}/jobs

### 3.6.4 Delete Job Request

**DELETE** /users/{userId}/jobs/{jobId} Delete a job request.

### 3.6.5 Read Job

**GET** /users/{userId}/jobs/{jobId} Read job

### 3.6.6 List User Jobs by Status

**GET** /users/{userId}/jobs?status={status} List all jobs of a user. Optionally, a status may be specified.

### 3.6.7 List Freelancer Jobs by Status

**GET /freelancers/{freelancerId}/jobs?status={status}** List all jobs of a freelancer. Optionally, a status may be specified.

### 3.6.8 List Open Jobs by JobType

**GET /jobtypes/{jobTypeId}/jobs** List all open jobs of a specific type.

### 3.6.9 List Open Jobs by JobType and Location Area

**GET /jobtypes/{jobTypeId}/jobs/latitude/{latitude}/**

**longitude/{longitude}/range/{range}** List all open jobs of a specific type by location coordinates and a range in km.

Sample response:

```
{
  "data": [
    {
      "id": "6ec322a1-c190-4386-a17f-5ff9cb87b01c",
      "status": "OPEN",
      "title": "Baby sitter request",
      "description": "",
      "created": 1462883463063,
      "rating": 0,
      "jobTypeId": "e0d136eb-8e33-426d-aef3-a66ce5c668de",
      "freelancerId": null,
      "userId": "5a6a7a5b-a66c-4cb8-bc61-14dea633a8ca",
      "locationId": "364b5a88-6ebe-43da-8ebb-0035e1305d5a",
      "netAmount": 0.0,
      "total": 0.0
    }
  ],
  "success": true,
  "message": null
}
```

### 3.6.10 Request payment

**POST /freelancers/{freelancerId}/jobs/{jobId}/netAmount/{netAmount}**

Request payment for the job. Sets the netAmount, computes total and sets

status to PAYMENT\_REQUESTED.

## 3.7 Subscription Methods

### 3.7.1 Subscribe / Update subscription

**POST** /freelancers/{freelancerId}/jobs/{jobId}/subscriptions Subscribe to a job. This method can also be used to modify the subscription message.

Sample payload:

```
{
    "message" : "Some message from the freelancer"
}
```

### 3.7.2 Accept subscription

**POST** /users/{userId}/jobs/{jobId}/subscriptions/{freelancerId} Accept freelancer subscription. Sets ACCEPTED status and copies freelancerId and message to the job.

### 3.7.3 Delete subscription

**DELETE** /freelancers/{freelancerId}/jobs/{jobId}/subscriptions Delete subscription

### 3.7.4 List Job subscriptions

**GET** /users/{userId}/jobs/{jobId}/subscriptions List all subscriptions to a job

Sample response:

```
{
  "data": [
    {
      "jobId": "6ec322a1-c190-4386-a17f-5ff9cb87b01c",
      "freelancerId": "e0d136eb-8e33-426d-aef3-a66ce5c668de",
      "message": "Some message from the freelancer"
    }
  ],
  "success": true,
  "message": null
}
```

### 3.7.5 List Freelancer Subscriptions

**GET /freelancers/{freelancerId}/subscriptions** List all freelancer subscriptions

```
{
  "data": [
    {
      "jobId": "6ec322a1-c190-4386-a17f-5ff9cb87b01c",
      "freelancerId": "e0d136eb-8e33-426d-aef3-a66ce5c668de",
      "message": "Some message from the freelancer"
    }
  ],
  "success": true,
  "message": null
}
```