Field Agent

Create a web application to track field agents from government, private, and secret agencies. In addition, track their assignments. The application allows users to add, edit, and delete both field agents and assignments.

Technical Requirements

- Spring MVC/Spring Boot
- Thymeleaf
- Spring MVC built-in validation using validation annotations and BindingResult
- Thymeleaf validation extensions
- Bootstrap **v4.***
- Absolutely **no JavaScript allowed**.
- A database schema, initial data, and a set of Jpa repositories are provided (more below).
- You must complete a full set of service components.

Additional Considerations

- If a field agent is deleted, all of their assignments must be deleted as well.
- Assignment dates must never overlap. This holds even if you change agents on an assignment.
- Do not inject repositories into controllers. Only service components are allowed in controllers.

What is provided

- The *FieldAgent* project in your class repository... Pull down the latest. Move it to your personal repository. Then work on it.
- A database schema with intial data.
- 5 database entities (Java classes, database models)
- 5 Jpa repositories

You should not need to edit the repositories. If you feel it is necessary, ask first. You will need to create a set of robust service components that manage domain rules. Validate incoming data and requests.

Data

Main Entities

Can add, update, and delete.

Field Agent

- First Name - Required
- Middle Name or Initial
- Last Name - Required
- Picture Url
- Birth Date - Between 1/1/1900 and ten years from the current day.
- Height in inches - Required, between 36 and 96
- Identifier - User-entered, Required, must be globally unique
- Agency - Required, See Below
- Activation Date - Required
- Security Clearance - Required, See Below
- Is Active

Assignment

- Agent Identifier - Required
- Country Code - Required, from [ISO 3166-1](#)
- Start Date - Required, must be before Projected and Actual End Date
- Projected End Date - Required, must be after Start Date
- Actual End Date - Complete on mission completion, must be after Start Date
- Notes

> Extra validation: assignment dates may **not** overlap for a field agent. They can only be in one place at a time.
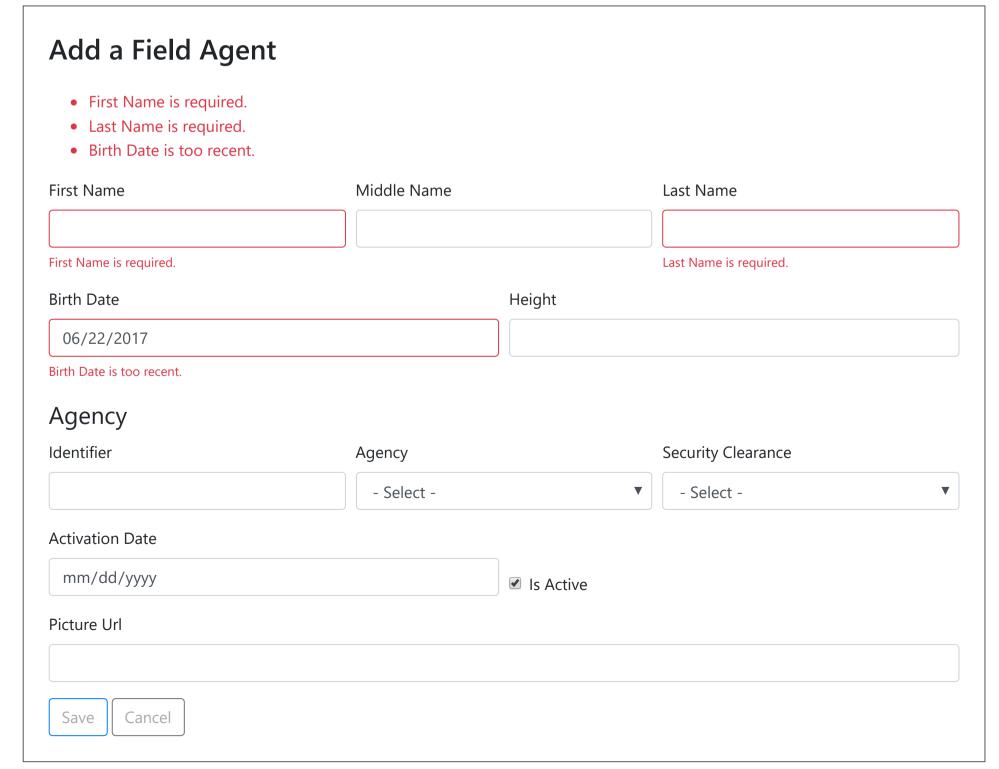
Supporting Data

- 9 Agencies
- 4 Security Clearances
- 249 Countries

Supporting data is read-only unless you want to extend your application as a stretch goal. Feel free to add, update, or remove data to give your application the required "flavor".

Sample Wireframes

- Intentionally Incomplete
- Most notes in parenthesis are *not* part of the UI.

Home

Add An Agent

Field Agent	Agency		
Fulvia Scandwright (Click to edit agent)	CIA	Delete	Add an Assignment
Hugh Skillicorn	ODIN	Delete	Add an Assignment
Odey De la Yglesia	NSA	Delete	Add an Assignment
Chrotoem Whyberd	CIA	Delete	Add an Assignment

Add a Field Agent

- First Name is required.
- Last Name is required.
- Birth Date is too recent.

First Name

First Name is required.

Middle Name

Last Name

Last Name is required.

Birth Date

06/22/2017

Birth Date is too recent.

Height

Agency

Identifier

Agency

- Select -

Security Clearance

- Select -

Activation Date

mm/dd/yyyy

☑ Is Active

Picture Url

Save Cancel

Delete Fulvia Scandwright?

Assignments: 9
Deletions are permanent.
Both Fuliva and her 9 assignments will be deleted forever.

Continue?

[Delete] [Cancel]

Field Agent

First Name
Fulvia

Middle Name
M

Last Name
Scandwright

Birth Date
11/23/1982

Height
68

Agency

Identifier
SC-123-REX9

Agency
Southern Reach ▼

Security Clearance
Secret ▼

Activation Date
04/12/2002

☑ Is Active

Picture Url
http://corbos.github.com/field-agent/psychologist.jpg

[Save] [Cancel]

Assignments

Add An Assignment

Country	Start	End		
Belarus	2/6/2005	1/28/2006	Delete	View/Edit
Belgium	12/17/2006	8/30/2007	Delete	View/Edit
Barbados	2/26/2008	11/2/2008	Delete	View/Edit

(Sort Assignments by Date)

Assignment

Field Agent

Fulvia Scandwright ▾

Country

Eritrea ▾

Start

04/12/2002

Projected End

08/21/2002

Actual End

mm/dd/yyyy

Notes

Boat arrival.
Meet local contact and exchange objectives.
Blend in.

Save   Cancel