Sisällys

[RESTful Application Design 2](#_Toc466625996)

[Resources (Indentification) 3](#_Toc466625997)

[Resource Representations 4](#_Toc466625998)

[Endpoint of Resources (Indentification) 8](#_Toc466625999)

[Actions of Resources 9](#_Toc466626000)

RESTful Application Design   
(tiimin sisäinen tekninen dokumentti, ei asiakasdokumentti)

1. **Resources** (Idenfication)
2. **Resource Representations**
3. **EndPoints** of Resources
4. **Actions of** Resources

Lähteenä

Varanasi, Belida: **Spring REST** (2015)

* Erityisesti 4. luvun ’Designing QuickPoll’-aliluku
* Kirjan esimerkkikoodi osoitteessa <https://github.com/bava/springrest-book>
* HH:n kirjaston [e-kirjana](http://libguides.haaga-helia.fi/az.php?userLang=fi) Safari-palvelussa (max. 5 samanaikaista lukijaa)

Resources (Indentification)

|  |  |
| --- | --- |
| **Resource** | **Description** |
| Questionnare | Singleton Questionnare Resource |
| Questionnares | Collection Questionnare Resource |
| Question | Singleton Question Resource |
| Questions | Collection Question Resource |
| … |  |

Resource Representations

**Question representation**

{"id": 12345,

"question": “Koulutusohjelma?“,

“questionnare\_id”: 1

}

**Question list representation**

[

{"id": 12345, "question": "Koulutusohjelma?", “questionnare\_id”: 1},

{"id": 12333, "question": "Ikä?", “questionnare\_id”: 1},

{"id": 22789, "question": "Miten parantaisit viihtyvyyttä yleisissä tiloissa?", “questionnare\_id”: 1},

{"id": 22799, "question": "Miten parantaisit viihtyvyyttä opiskelutiloissa?", “questionnare\_id”: 1},

{"id": 22800, "question": "Muuta lisättävää?", “questionnare\_id”: 1}  
]

**Questionnare representation**

{

"id": 1,   
        "name": "Questionnare1"  
}

**Questionnare list representation**

[

{

"id": 1,   
        "name": "Questionnare1",  
    
}

,

{  
        "id": 2,  
        "name": "Questionnare2"

}  
,

{  
        "id": 3,

 "name": "Questionnare3"

}

]

**Questionnare with Questions representation**

{

"id": 1,   
"name": "Questionnare1",  
 "questions": [

{"id": 12345, "question": "Koulutusohjelma?", “questionnare\_id”: 1},

{"id": 12333, "question": "Ikä?", “questionnare\_id”: 1},

{"id": 22789, "question": "Miten parantaisit viihtyvyyttä yleisissä tiloissa?", “questionnare\_id”: 1},

{"id": 22799, "question": "Miten parantaisit viihtyvyyttä opiskelutiloissa?", “questionnare\_id”: 1},

{"id": 22800, "question": "Muuta lisättävää?", “questionnare\_id”: 1}  
        ]  
}

**Questionnare list with Questions - representation**

**[**

{

"id": 1,   
 "name": "Questionnare1",  
  "questions": [

{"id": 12345, "question": "Koulutusohjelma?", “questionnare\_id”: 1},

{"id": 12333, "question": "Ikä?", “questionnare\_id”: 1},

{"id": 22789, "question": "Miten parantaisit viihtyvyyttä yleisissä tiloissa?", “questionnare\_id”: 1},

{"id": 22799, "question": "Miten parantaisit viihtyvyyttä opiskelutiloissa?", “questionnare\_id”: 1},

{"id": 22800, "question": "Muuta lisättävää?", “questionnare\_id”: 1}  
 ]  
}

,

{  
        "id": 2,  
        "name": "Questionnare2",  
         "questions": [

{"id": 42333, "question\_id": "Nimi?", “questionnare\_id”: 2 },

{"id": 42789, "question\_id": "Millä kuljet?", “questionnare\_id”: 2}  
        ]  
},

{  
        "id": 3,  
        "name": "Questionnare3",  
         "questions": [

{"id": 52333, "question\_id": "Nimi?", “questionnare\_id”: 3 },

{"id": 52789, "question\_id": "Millä kuljet?", “questionnare\_id”: 3}

 ]  
}

**]**

Endpoint of Resources (Indentification)

EndPoint Conventios – Questionnares Examples (Endpoint = bold)

http://localhost:8080**/Questionnares**

http://localhost:8080**/Questionnares/{QuestionnareId}**  
http://localhost:8080**/Questionnares/1**   
  
http://localhost:8080**/Questionnares/{QuestionnareId}/Questions**

Actions of Resources

Actions of Questionnare/Questionnares Resource

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Http**  **Method** | **Resource EndPoint** | **Input** | **Success Response** | **Error**  **Response** | **Description** |
| **GET** | /Questionnares | Body: Empty | Status:200  Body: Questionnare List | Status:500 | Retrieves all available Questionnares |
| POST | /Questionnares | Body:New Questionnare Data | Status:201  Body: Newly created Questionnare id | Status:500 | Creates a new Questionnare. |
| PUT | /Questionnares | N/A | N/A | Status:400 | Forbidden action |
| DELETE | /Questionnares | N/A | N/A | Status:400 | Forbidden action |
| **GET** | /Questionnares/{QuestionnareId} | Body: Empty | Status: 200  Body: Questionnare Data | Status:404 or 500 | Retrieve an existing Questionnare. |
| POST | /Questionnares/{QuestionnareId} | N/A | N/A | Status:400 | Forbidden action |
| PUT | /Questionnares/{QuestionnareId} | Body: Questionnare Data with updates | Status: 200  Body: Empty | Status:404 or 500 | Updates an existing Questionnare. |
| DELETE | /Questionnares/{QuestionnareId} | Body: Empty | Status: 200 | Status:404 or 500 | Deletes an existing Questionnare. |
| **GET** | /Questionnares/{QuestionnareId}/Questions | Body: Empty | Status: 200  Body: Questionnare Data with Question data | Status:404 or 500 | Retrieve an existing Questionnare with Question data |
| etc |  |  |  |  |  |

Actions of Question/Questions Resource

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Http**  **Method** | **Resource EndPoint** | **Input** | **Success Response** | **Error**  **Response** | **Description** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Actions of ComputedParticipantCounts Resource

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Http**  **Method** | **Resource EndPoint** | **Input** | **Success Response** | **Error**  **Response** | **Description** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |