We have a metadata documentation system at Cancer Registry called ELVIS. The purpose of the system is to document what data variables Cancer Registry maintain and what value sets are allowed for each of them. It has a set of public REST APIs that return data in JSON arrays.

We would like you to write a simple front end using HTML, CSS and Javascript that would employ this API to query, browse and display data in an organized way.

In addition, it should allow to sort data at front end. We would also like to have export feature so results can be saved to an external file on users local computer.

Cancer Registry uses React framework with styling done in Bootstrap.

Metadata system is available publicly on internet at

https://metadata.kreftregisteret.no

## Open API endpoints

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | | | |
| **Path** | **Method** | **Request params** | **Description** |
| /rest/v1/variables/:filtered | GET | keyword | Returns all variables with optional search by text keyword |
| /rest/v1/variables/{id} | GET |  | Single variable by given id |

## Sample of variable output

== start of sample ==================================================================

[   
  {   
    **"id"**:5,  
    **"version"**:1,  
    **"informationLevel"**:{   
      **"id"**:3,  
      **"name"**:"Sykdomstilfelle",  
      **"nameEn"**:"Case",  
      **"sortering"**:2  
    },  
    **"category"**:{   
      **"id"**:12,  
      **"name"**:"Kirurgi",  
      **"nameEn"**:"Surgery",  
      **"description"**:"Informasjon om kirurgiske inngrep og metoder benyttet i behandlingen av den spesifikke kreftdiagnosen.",  
      **"descriptionEn"**:"Information about surgical procedures and methods used in the treatment of the specific cancer diagnosis.",  
      **"sortering"**:5,  
      **"parent"**:{   
        **"id"**:5,  
        **"name"**:"Behandling",  
        **"nameEn"**:"Treatment",  
        **"description"**:"Informasjon om hvilke typer behandling pasienten har gjennomgått for den spesifikke kreftdiagnosen",  
        **"descriptionEn"**:"Information about which types of treatment the patient has undergone for that specific cancer diagnosis",  
        **"sortering"**:15,  
        **"parent"**:null  
      }  
    },  
    **"dataType"**:{   
      **"id"**:1,  
      **"name"**:"Alfanumerisk",  
      **"nameEn"**:"Alphanumeric",  
      **"sortering"**:null,  
      **"description"**:"Feltet kan inneholde bokstaver, tall og tegn",  
      **"descriptionEn"**:"The field can contain letters, numbers and characters"  
    },  
    **"registrationMethod"**:{   
      **"id"**:8,  
      **"name"**:"Laget av regelmotor/system i Kreftregisteret",  
      **"nameEn"**:"Generated by rule engine/system in the Cancer Registry",  
      **"description"**:"Variabler som er laget ved hjelp av definerte regler i Kreftregisterets regelmotor, GURI, eller i andre systemer. Kan inkludere både kalkulerte variabler og genererte variabler. ",  
      **"descriptionEn"**:"Variables made through defined rules in the Cancer Registry rule engine, GURI or by other systems. Can include both calculated and generated variables. ",  
      **"sortering"**:2  
    },  
    **"status"**:{   
      **"id"**:30,  
      **"name"**:"Aktiv",  
      **"nameEn"**:"Active",  
      **"description"**:null,  
      **"descriptionEn"**:null  
    },  
    **"techName"**:"kir",  
    **"name"**:"Kirurgi",  
    **"nameEn"**:"Surgery",  
    **"description"**:"Mest omfattende kirurgi utført som primærbehandling for krefttilfellet. \n",  
    **"descriptionEn"**:"Most comprehensive surgery done as primary treatment for the cancer case. \n",  
    **"validFrom"**:"01-01-1953",  
    **"example"**:"10",  
    **"receivedIn"**:true,  
    **"givenOut"**:true,  
    **"required"**:true,  
    **"createdOn"**:"18-07-2018",  
    **"createdBy"**:"sla",  
    **"updatedOn"**:"30-08-2019",  
    **"updatedBy"**:"gipi",  
    **"approvedOn"**:"19-11-2018",  
    **"approvedBy"**:"sla",  
    **"dataSize"**:2,  
    **"existsInPrimary"**:true,  
    **"existsInRecurrence"**:false,  
    **"validForExtraction"**:2,  
    **"descriptionOfQuality"**:"Svært god. \n\nFinnes for alle tilfeller, med gode grunnlagsdata for generering av variabelen. "  
  },  
  {   
    **"id"**:6,  
    **"version"**:1,  
    **"informationLevel"**:{   
      **"id"**:2,  
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      **"nameEn"**:"Message",  
      **"sortering"**:1  
    },  
    **"category"**:{   
      **"id"**:12,  
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      **"nameEn"**:"Surgery",  
      **"description"**:"Informasjon om kirurgiske inngrep og metoder benyttet i behandlingen av den spesifikke kreftdiagnosen.",  
      **"descriptionEn"**:"Information about surgical procedures and methods used in the treatment of the specific cancer diagnosis.",  
      **"sortering"**:5,  
      **"parent"**:{   
        **"id"**:5,  
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        **"nameEn"**:"Treatment",  
        **"description"**:"Informasjon om hvilke typer behandling pasienten har gjennomgått for den spesifikke kreftdiagnosen",  
        **"descriptionEn"**:"Information about which types of treatment the patient has undergone for that specific cancer diagnosis",  
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        **"parent"**:null  
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    },  
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      **"nameEn"**:"Alphanumeric",  
      **"sortering"**:null,  
      **"description"**:"Feltet kan inneholde bokstaver, tall og tegn",  
      **"descriptionEn"**:"The field can contain letters, numbers and characters"  
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    **"registrationMethod"**:{   
      **"id"**:1,  
      **"name"**:"Manuelt kodet i Kreftregisteret",  
      **"nameEn"**:"Manually coded in the Cancer Registry",  
      **"description"**:"Ustrukturert informasjon fra kilde om er manuelt kodet og registrert i Kreftregisteret. ",  
      **"descriptionEn"**:"Unstructured information from source which is manually coded and registered in the Cancer Registry.",  
      **"sortering"**:8  
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    **"status"**:{   
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      **"descriptionEn"**:null  
    },  
    **"techName"**:"kir",  
    **"name"**:"Kirurgi",  
    **"nameEn"**:"Surgery",  
    **"description"**:"Det mest omfattende kirurgiske inngrep utført i den undersøkelsen meldingen omhandler.",  
    **"descriptionEn"**:"The most comprehensive surgical procedure done in the examination the message concerns. ",  
    **"validFrom"**:"01-01-1953",  
    **"example"**:"01",  
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    **"givenOut"**:true,  
    **"required"**:true,  
    **"createdOn"**:"18-07-2018",  
    **"createdBy"**:"sla",  
    **"updatedOn"**:"03-05-2019",  
    **"updatedBy"**:"gipi",  
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    **"approvedBy"**:"sla",  
    **"dataSize"**:2,  
    **"existsInPrimary"**:true,  
    **"existsInRecurrence"**:true,  
    **"validForExtraction"**:3,  
    **"dataExtractionComment"**:"Variabelen er en inn-variabel/hjelpevariabel som normalt ikke leveres ut. \n\nInformasjon fra variabelen finnes på aggregert nivå og kan leveres ut derfra. De aggregerte variablene finnes markert som \"Kan leveres ut\" = \"Ja\" eller \"Ved spesielle behov\" i dette systemet. ",  
    **"descriptionOfQuality"**:"Svært god.\n\nFinnes for alle meldinger. God kunnskap om koding av denne variabelen."  
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  {   
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    **"version"**:1,  
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      **"sortering"**:2  
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      **"id"**:12,  
      **"name"**:"Kirurgi",  
      **"nameEn"**:"Surgery",  
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      **"descriptionEn"**:"Information about surgical procedures and methods used in the treatment of the specific cancer diagnosis.",  
      **"sortering"**:5,  
      **"parent"**:{   
        **"id"**:5,  
        **"name"**:"Behandling",  
        **"nameEn"**:"Treatment",  
        **"description"**:"Informasjon om hvilke typer behandling pasienten har gjennomgått for den spesifikke kreftdiagnosen",  
        **"descriptionEn"**:"Information about which types of treatment the patient has undergone for that specific cancer diagnosis",  
        **"sortering"**:15,  
        **"parent"**:null  
      }  
    },  
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      **"id"**:6,  
      **"name"**:"Numerisk",  
      **"nameEn"**:"Numeric",  
      **"sortering"**:null,  
      **"description"**:"Feltet inneholder tall eller spesifikke numeriske tegn",  
      **"descriptionEn"**:"The field contains numbers or specific numeric data entry characters"  
    },  
    **"registrationMethod"**:{   
      **"id"**:8,  
      **"name"**:"Laget av regelmotor/system i Kreftregisteret",  
      **"nameEn"**:"Generated by rule engine/system in the Cancer Registry",  
      **"description"**:"Variabler som er laget ved hjelp av definerte regler i Kreftregisterets regelmotor, GURI, eller i andre systemer. Kan inkludere både kalkulerte variabler og genererte variabler. ",  
      **"descriptionEn"**:"Variables made through defined rules in the Cancer Registry rule engine, GURI or by other systems. Can include both calculated and generated variables. ",  
      **"sortering"**:2  
    },  
    **"status"**:{   
      **"id"**:30,  
      **"name"**:"Aktiv",  
      **"nameEn"**:"Active",  
      **"description"**:null,  
      **"descriptionEn"**:null  
    },  
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    **"name"**:"Kirurgisk teknikk",  
    **"nameEn"**:"Surgical technique",  
    **"description"**:"Beskrivelse av hvilken kirurgisk teknikk som er brukt ved radikal prostatektomi.",  
    **"descriptionEn"**:"Surgical technique for radical prostatectomy.",  
    **"validFrom"**:"01-01-2009",  
    **"example"**:"1",  
    **"questionText"**:"Kirurgi",  
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    **"createdBy"**:"ansk",  
    **"updatedOn"**:"30-11-2018",  
    **"updatedBy"**:"krei",  
    **"approvedOn"**:"30-11-2018",  
    **"approvedBy"**:"krei",  
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    **"existsInPrimary"**:true,  
    **"existsInRecurrence"**:false,  
    **"validForExtraction"**:2,  
    **"dataExtractionComment"**:"",  
    **"descriptionOfQuality"**:"Variabelen kommer fra kirurgimeldingen, det er god rapporteringsgrad på kirurgimelding for prostata. Se årsrapporten for prostatakreft for mer informasjon om datakvalitet og rapporteringsgrad."  
  }  
]

== end of sample ==================================================================