732A94 Advanced R Programming
Computer lab 5: API R projects

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3 October 2024 (A31)

Seminar date: **9 October 10:15** (A31)
Lab deadline: **13 October 23:59**

Below are some API that can be used as a part of the assignment to implement an R package to connect to an API. In connection to each API there is a short description and the difficulty of implementation is indicated using one, two or three stars with one star (simpler) to three stars (difficult). Some projects are about implementing XML parsers for more complex XML files of interest.

In general there exist many different web API:s and you can choose any API you may find interesting. Most web API:s in Sweden can be found in **API-katalogen** (`http://apikatalogen.se/api`). If you choose any of these other than the ones listed below you need to confirm your choice with the teacher, the only restriction is that the API should not already have an R package.

* OpenStreetMaps via Stamen Tiles is a free alternative to the Google Maps API. Stamen provides three tiles that uses OpenStreetMap data, and that can be freely used. More information can be found **here** (`http://maps.stamen.com`). The ggmap library can provide access to Stamen maps, although you can still downloads maps from Google if you have an API key. More information **here** (`http://github.com/dkahle/ggmap`).

* Kolada API is an API to the Kolada database that contains key indicators regarding the Swedish municipalities. More information can be found **https://www.kolada.se/om-oss/api/here** (`https://www.kolada.se/om-oss/api/`).

** Riksdagen or the Swedish parliment have an API to get documents, debates and information about members of parliment. Information about the API can be found **here** (`http://data.riksdagen.se/`).
The data is mainly textual data so the R package should convert the data to the datastructures used in the `tm` R package.

** Språkbanken XML is a web resource with corpora in XML format. As with the other textual resources the purpose with this corpus is to read any XML file into R as a `tm` type corpus object with all textual metadata included. The Swedish corpora can be found **here** (`http://spraakbanken.gu.se/swe/resurser/corpus`) while in multiple languages (including Swedish) **here**

(`https://spraakbanken.gu.se/resurser/corpus`).

*** Thenmaps Historical map in geoJSON format. Need to handle spatial data, see spatial.ly for more information on geographical data. More information can be found **here** `http://www.thenmap.net/`.