

# Developer on GeoTimeWFS project

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4TH YEAR ENGINEERING INTERNSHIP ORAL PRESENTATION

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# Global presentation



- Internship made in work team with Christopher BLARD
- Project managed by Claire PRUDHOMME and Jean-Jacques PONCIANO

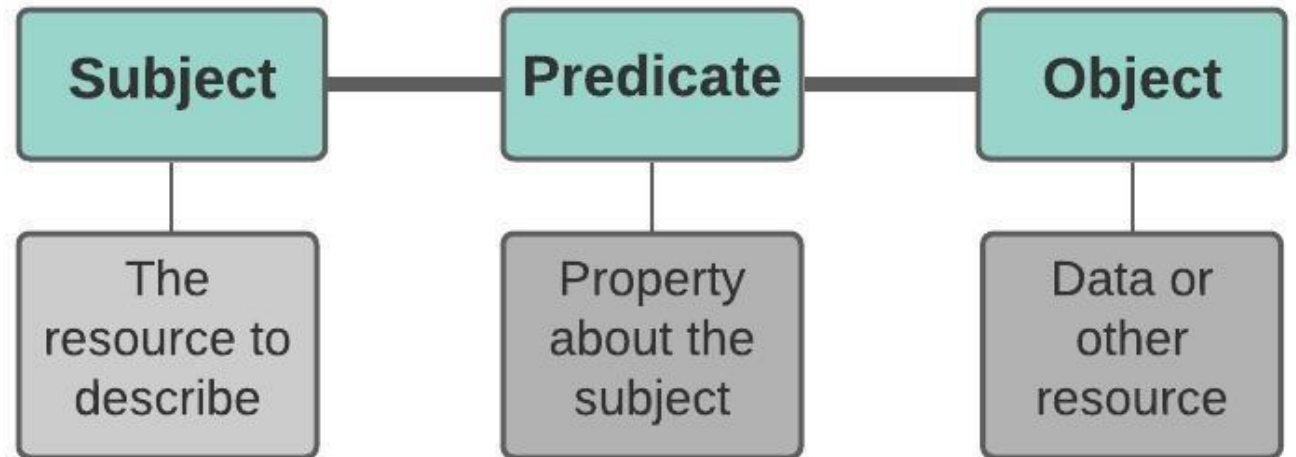
# Details of the project

**BEGINNING**  
- 2020



**END** - Last week  
of August, 2021

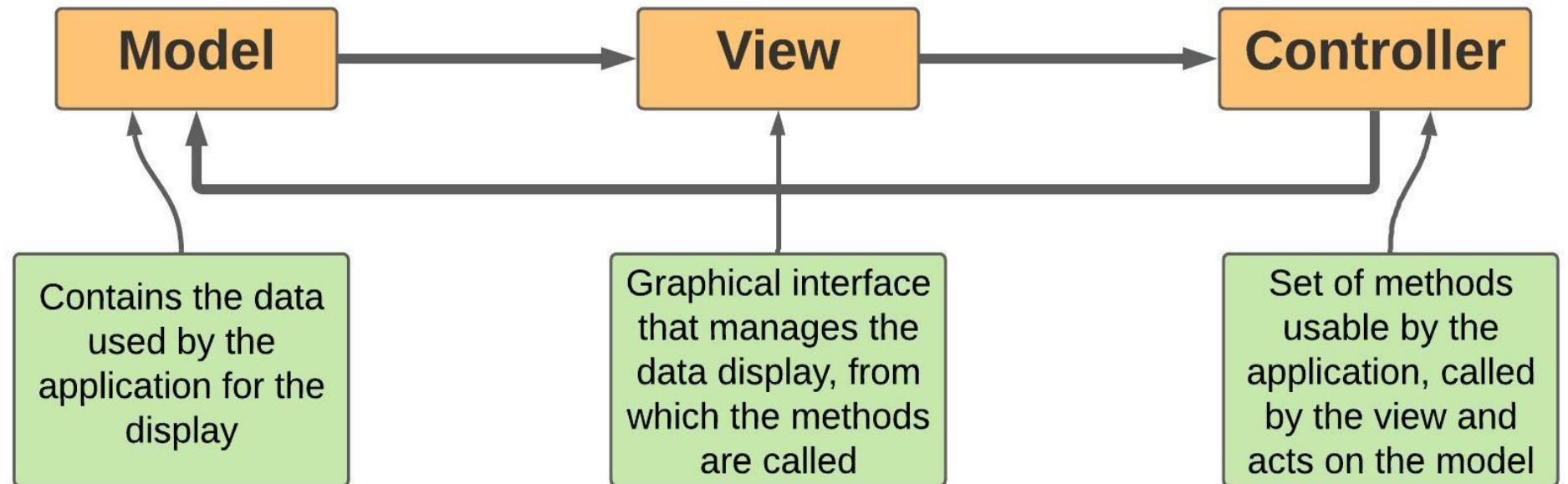
- Use semantic Web
- Expressed with the RDF language
- Set up by the W3C organization
- The data is linked and can be used by several applications



# Architecture of the project



- Models and controllers are coded in Java and Views are coded in HTML
- Spring Boot permits to create application, based on request



# Desired application

- Menus and submenus
- Views, each corresponding to a functionality
- Majority of the view already done
- Two more functionalities to add :
  - Thematic maps
  - Enrichment

The screenshot shows the GDI-DE Linked Data application interface. At the top, there is a navigation bar with the GDI-DE logo and the title 'Linked Data'. To the right of the title are links for 'English', 'Login', and 'Contact', along with the GDI-DE logo. Below the navigation bar is a red menu bar with the following items: 'Data management', 'SPARQL endpoint', 'Semantic WFS', 'Metadata catalogue', 'Thematic map', and 'Documentation'. The main content area is titled 'BKG Linked Data and Semantic Data management'. It contains six placeholder boxes for images, each with a label: 'image for Linked Data management', 'image for Linked Data enrichment', 'image for Semantic Web Feature Service', 'image for Metadata Catalogue', 'image for Thematic map creation', and 'image for Spatio-temporal map'. On the right side of the main content area, there are two sections: 'Provider' and 'Contact'. The 'Provider' section lists 'GDI-DE Geodateninfrastruktur Deutschland' and its URL 'https://www.gdi-de.org'. The 'Contact' section lists the 'Coordination Office SDI Germany' with contact details: 'Telefon: 069 6333-258', 'Telefax: 069 6333-446', 'mail@gdi-de.org', and 'www.gdi-de.org'. It also lists the 'Postal address: Coordination Office SDI Germany, Federal Office for Cartography and Geodesy, Richard-Strauss-Avenue 11, 60598 Frankfurt am Main, Germany'. At the bottom of the 'Contact' section, it lists the 'Press contact: pressekontakt@gdi-de.org' and 'Twitter: www.twitter.com/gdi\_de'. At the bottom of the page, there is a footer with the text '© 2019 - Bundesamt für Kartographie und Geodäsie, Richard-Strauss-Allee 11, 60598 Frankfurt am Main' and a logo for 'This page in [XML] [JSON]'.

# Enrichment

- SPARQL language for get web Semantic datas
- Ontology contains web semantic datas
- Wikidata : contains all Wikipedia data as RDF triplet
- SPARQL endpoint at <https://query.wikidata.org/>
- Enrichment : make the same SPARQL request on local ontology and on remote query services and show results

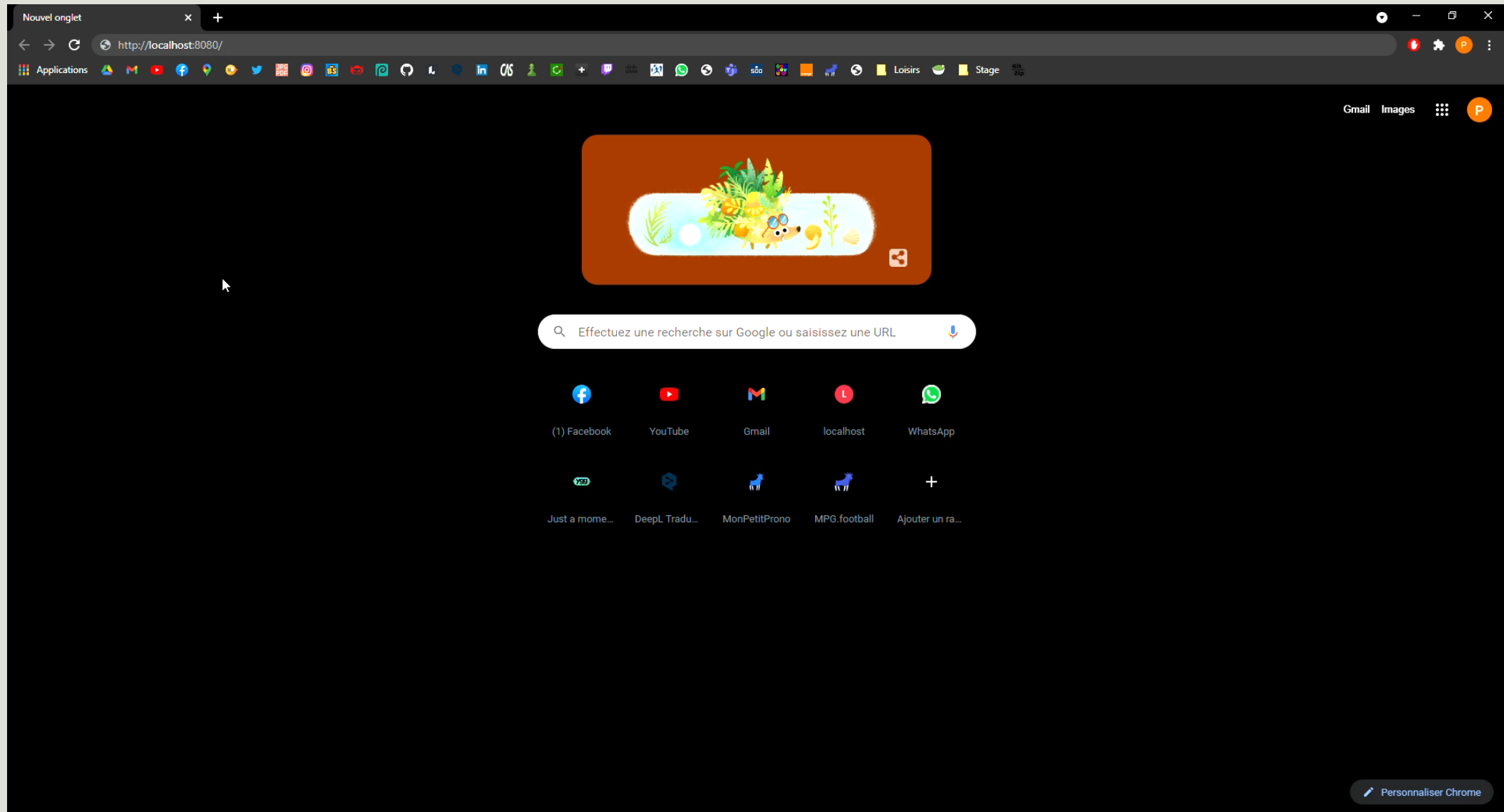


# Work environnement

- Compilation with Eclipse > Execution of .jar with PowerShell > open in Web navigator at <http://localhost:8080/>
- Creation of a controller and views for fonctionnalités
- Use of the jena library of java which allows to use the SPARQL language
- View edition with Sublim Text







# Conclusion

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## Technical assessment

- Able to make local and remote SPARQL requests
- Link local and remote
- Style working (HTML, CSS)

## Personal assessment

- Learning of new concepts (semantic web, MVC, ...)
- Work in team with Christopher, meetings

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Thank you for  
watching !