**Project Title:** WellWell Project

**Team members:**

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**Project description/outline**

The outline of this project is to sort, clean up and combined well data attributes exported from various government websites. For example, one of the website will provide well header attributes and list of reports when another provide Biostratigraphy data. The final dataset can be use as single source in the database and visualizing for the end users in the future.

Scope of this project is limited to 3 wells located in Bonaparte Basin, WA region. Three of the wells are listed here:

Plover 1

Plover 2

Whimbrel 1

Data attributes will be divided into sub-attributes such as Well header, Well Reports and Biostratigraphy Data.

**Datasets to be captured**

Sources: - NOPIMS (<https://nopims.dmp.wa.gov.au/Nopims/Search/Wells>)

1. Borehole Name, Well location (LAT/LONG)
2. UBHI, Title
3. Basin/Sub basin
4. Rig Name
5. Borehole operator

Well\_Reports : [https://nopims.dmp.wa.gov.au/Nopims/Search/WellDetails#](https://nopims.dmp.wa.gov.au/Nopims/Search/WellDetails)

1. Borehole name, Type, Archive ID

Sources: - Geoscience Australia

Whimbrel 1 : <http://dbforms.ga.gov.au/www/npm.well.summary_report?pName=Whimbrel%201&pEno=16958&pTimescale=J&pDepthMax=2058.62&pDepthMin=0&pPeriod=&pStage=&pAgeMax=276.7&pAgeMin=0&pAgeTop=0&pAgeBase=3000&pTotalAge=276.7>

Plover 1:

<http://dbforms.ga.gov.au/www/npm.well.summary_report?pName=Plover%201&pEno=14880&pTimescale=J&pDepthMax=2438&pDepthMin=0&pPeriod=&pStage=&pAgeMax=272.3&pAgeMin=0&pAgeTop=0&pAgeBase=3000&pTotalAge=272.3>

Plover 2:

[http://dbforms.ga.gov.au/www/npm.well.summary\_report?pName=Plover%202&pEno=14881&pTi, mescale=J&pDepthMax=1524&pDepthMin=0&pPeriod=&pStage=&pAgeMax=290.06&pAgeMin=0&pAgeTop=0&pAgeBase=3000&pTotalAge=290.06](http://dbforms.ga.gov.au/www/npm.well.summary_report?pName=Plover%202&pEno=14881&pTi,%20mescale=J&pDepthMax=1524&pDepthMin=0&pPeriod=&pStage=&pAgeMax=290.06&pAgeMin=0&pAgeTop=0&pAgeBase=3000&pTotalAge=290.06)

1. Borehole Name
2. Sea floor, Total Depth, Kelly Bushing/Rotary Table
3. Biostratigraphy (Depth/Zone)

Additional to add to the report

* https://www.dmp.wa.gov.au/Petroleum/Bonaparte-Basin-10987.aspx

**Transformations to be performed**

Dataset will be cleaned and combined and arranged accordingly in pgAdmin.

**Rough breakdown of tasks**

1. Extract data from Government websites such as Geoscience Australia and NOPIMS
2. Combined and matched data by well names to be use as final dataset
3. Save the cleaned data to the database

**Data structure in the database**

**Fact Table**

* Bore hole ID (PK)
* Borehole Name
* UBHI(NOPIMS)
* Basin ID (FK)
* Document ID (FK)
* Biostrat ID(FK)
* Elevation ID (FK)

**well\_header**

* ID (PK)
* Well location (LAT/LONG)
* State
* Rig Name
* Borehole operator

**basin**

* Basin ID (PK)
* Basin
* Sub\_Basin

**well\_reports**

* Document ID (PK)
* Document Title
* Document Type

**biostrat**

* Biostrat ID (PK)
* Depth
* Zone

**elevation**

* ID (PK)
* Sea floor
* Kelly Bushing/Rotary Table