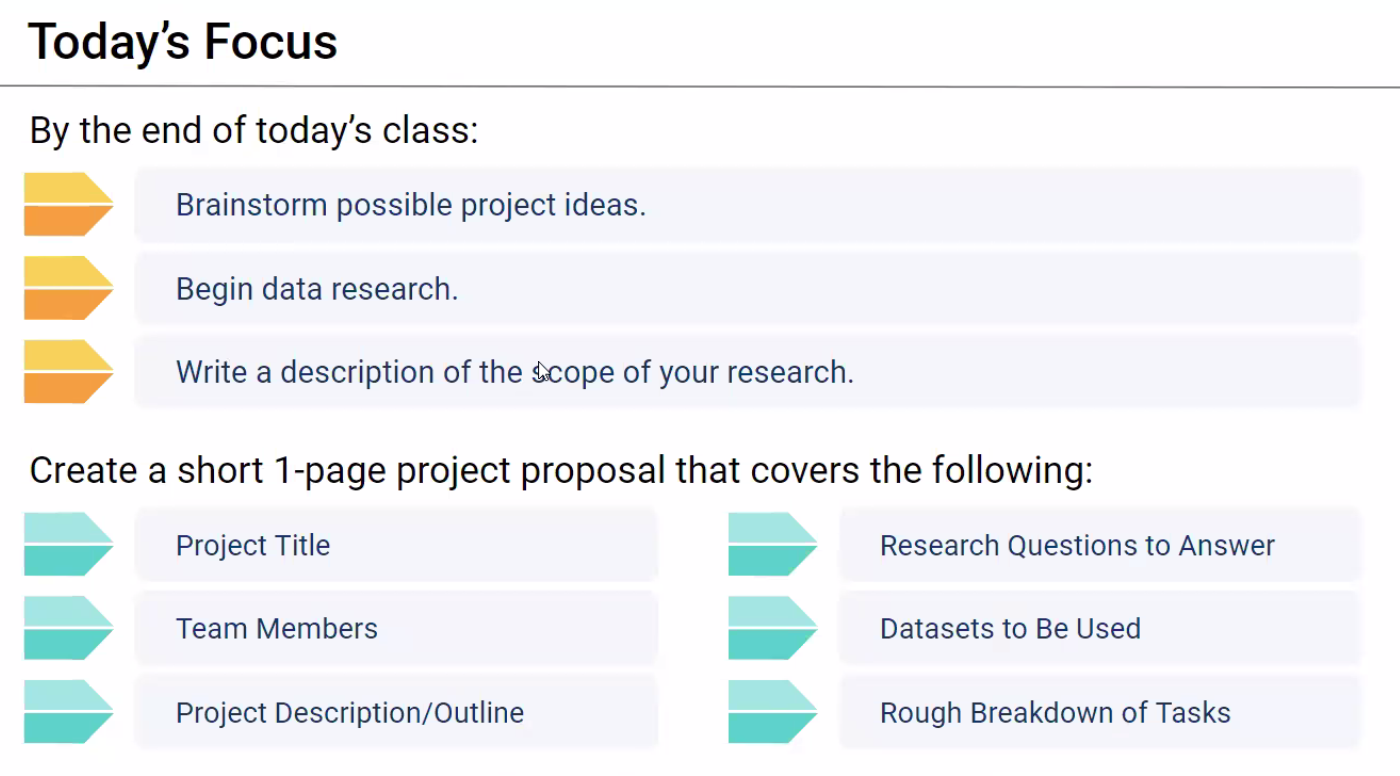
Alpaca trade

<https://github.com/alpacahq/alpaca-trade-api-python/>



**Brainstorm possible project ideas:**

1. Real estate/property market (Fab)
   1. Migration data <https://www.abs.gov.au/statistics/people/population/overseas-migration/2022-23-financial-year#data-downloads>
   2. Housing data <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/residential-property-price-indexes-eight-capital-cities/latest-release>
   3. <https://developer.proptrack.com.au/docs/apis/home>
   4. Population data
   5. RBA interest rate/inflation data
2. Stock market/RBA/ABS (Lewis)
3. Energy sector (Simone)
   1. Big focus on carbon emissions in housing etc.
   2. ABS population <https://explore.data.abs.gov.au/>
   3. Victoria phasing out gas
   4. Carbon emission/temperature vs share price of utility companies
   5. <https://www.abs.gov.au/statistics/industry/energy/energy-account-australia/2021-22energy> data
4. <https://data.gov.au/home> generic data

***What Question we want to answer?***

***What data sources we have available?***

*If its free?*

*Type? CSV/API*

*Current? e.g. 2022 onwards*

*Quantity? (2 years of data)*

**Structure**

* Host of repo - Lewis

**Completed Analysis Uploaded to GitHub (20 points)**

**Visualisations (20 points)**

**Analysis and Conclusion (20 points)**

**Group Presentation (20 points)**

**Slide Deck (20 points)**

**Group Contact**

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**Question Session 2**

Market Analysis: Exploring the relationship between overseas migration (net) and residential property prices

Migration - API

[https://explore.data.abs.gov.au/vis?tm=Migration&pg=0&df[ds]=ABS\_ABS\_TOPICS&df[id]=NOM\_FY&df[ag]=ABS&df[vs]=1.0.0&pd=2005%2C&dq=1%2B2%2B3.TOT.1%2B2%2B3..A&ly[cl]=SEX&ly[rw]=MEASURE%2CTIME\_PERIOD&ly[rs]=REGION](https://explore.data.abs.gov.au/vis?tm=Migration&pg=0&df%5bds%5d=ABS_ABS_TOPICS&df%5bid%5d=NOM_FY&df%5bag%5d=ABS&df%5bvs%5d=1.0.0&pd=2005%2C&dq=1%2B2%2B3.TOT.1%2B2%2B3..A&ly%5bcl%5d=SEX&ly%5brw%5d=MEASURE%2CTIME_PERIOD&ly%5brs%5d=REGION)

Housing Index

<https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/residential-property-price-indexes-eight-capital-cities/latest-release>

*or Prop track*

Question

1. Is there a correlation between net overseas migration and housing prices?
2. Based on the migration data, what was the highest and lowest states/territories impacted by migration between 2013-2021
3. Based on the housing data, what was the highest and lowest states/territories impacted by housing prices movements between 2013-2021

Limitations

* Data until 2021
* States & Cities

Graphs

* Line chart
* Geo map
* Scatter plot (regression line and r value)
* Bar chart