

**Due date:**

Final Report Due: March 9 @11:59 pm.

**Data description**

The Zillow dataset (modified) recorded Feb 2008- Dec 2015 monthly median sold price for housing in California, Feb 2008-Dec 2016 monthly median mortgage rate, and Feb 2008-Dec 2016 monthly unemployment rate. **Note:** you can not use the Jan-Dec 2016 monthly median sold prices as part of your analysis, training or testing. It's only for calculating your prediction accuracy **AFTER you finalize your model.**

I expect you to use this data in whatever way you see fit, to construct a time series analysis and model (univariate or multivariate) for forecasting the monthly median sold price for Jan-Dec 2016.

This process might include but not limited to summary descriptions, plots, model estimation, model validation, and forecasting.

**Report description:**

The final report will be a written report that clearly communicates the information below, in a manner suitable for the general audience who might or might not have taken a time series class.

- A description of the methods you have chosen for this project. A textual and/or visual justification of why you chose these methods is required (i.e. what type of model did you choose, why, and how did you choose it).
- A textual and/or visual report on your findings.
- A graphical and tabular forecasting results that must include the **RMSE** of the forecasting of the Jan-Dec 2016.

In addition to the report, you must submit a [Jupyter notebook](#) containing all your codes. Each group will submit one report and notebook.

Under the Assignment-Project-Peer review, each student is required to submit a peer review of your members separately, with a total score of 4, your final grade of this part will be based on the average of the peer scores your teammates give to you. If you give a score <4, please include why you think your teammate should not have a score 4. To avoid conflict, I strongly suggest each member to fit and validate at least one model.

Group members	Shan	David	Steve
Peer review		4	2 David and I fit all the models and

			wrote the discussion, Steve didn't do any of the modeling part)
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### **Grading rubric:**

The project is graded based on a total of 20 points.

Report: 16 points

Peer review:

- 4 points