APS360. Project Progress Report Handout and Rubric

The project progress report is a check-in to show that you are on track to complete your project. By the project progress date, you should have:

- Collected all the data
- Produced a baseline model
- Produced at least one result, including one qualitative or quantitative comparison
- Reflected upon and applied the TA recommendations from the progress meeting

The report document demonstrates your progress. The document has a word limit of maximum of 1700 words, but you really shouldn't need to use all of them. A concisely-written document is preferred.

Some of the sections are similar to your project proposal. You may find that when you look at your previous writing a second time, that you find ways of expressing your ideas more concisely.

The word limit is hard: There is a 1% penalty for every word in excess of the 1700 limit. **Please count the words in your document, compute the penalty, and put it on the front page.** These are not included in the word count, nor are pictures or references.

How to submit

Submit your proposal **as a group** on Quercus by July 24, 9:00pm.

There is a penalty-free grace period of one hour past the deadline. Any work that is submitted between 1 hour and 24 hours past the deadline will receive a 20% grade deduction. No other late work is accepted. Quercus submission time will be used, not your local computer time or any other screenshots that you provide. You can submit your work as many times as you want before the deadline, so please submit often and early.

Rubric

The project proposal document is graded out of 40 points.

Introduction and Illustration / Figure (2 points)

Update your introduction and illustrations based on previous feedback and more information about your model.

- 2/2 Addressed all feedback to create a stronger, more concise and more relevant introduction and illustration.
- 1/2 Did not address all feedback, or introduced new issues to the introduction and/or figure.

Data Processing (4 points)

Describe the data that you have collected and cleaned to date. Be clear and specific when describing what you've done, so that a classmate can reproduce your work. If possible, show some statistics about your cleaned data (e.g. number of examples in each class), and at least one example of a cleaned training data.

Since no plan ever survives first contact with reality, this section will probably be different from what you wrote in your proposal.

- 4/4 Clearly describes sources of data, and the steps you took to clean and format your data. Statistics and data example are well-chosen, and shows that you have completed data processing. Data cleaning descriptions are clear enough to reproduce by a classmate.
- 3/4 Mostly clear description, but some aspects of the data processing steps are vague. Statistics and data example shows that you have completed data processing.
- 2/4 Some of the data processing step are incomplete. If you have not completed data processing, your max grade is 2/4.
- 1/4 Many data processing steps are incomplete. If you have not completed data processing, your max grade is 2/4.

Baseline Model (2 points)

Briefly describe a simple, baseline model that you created to compare with your neural network. This can be a simple machine learning model, a hand-coded heuristic model (that does not use machine learning), or something else.

- 2/2 A reasonable choice of baseline, accompanied by a description of the baseline so that a knowledgable classmate can find, reproduce, or build a similar version.
- 1/2 An adequate description of a reasonable baseline, but not enough detail to reproduce it.
- 0/2 Poor choice of baseline inconsistent with the problem.

Architecture (4 points)

A description of the best model architecture that you have so far, and how you got to this point. This description should be more detailed than in your initial proposal. In particular, you should provide a rough idea of how complex your model is (e.g. number of layers, number of parameters), and what someone will have to do to reproduce a model similar to yours.

- 4/4 Description of the type(s) of models you used, with enough details so that someone can reproduce a model similar to yours, that will perform similarly. The choice of architecture makes sense for the problem.
- 3/4 There would be some minor difficulties in reproducing your model, due to ambiguity, lack of clarity, of missing information.
- 2/4 Some issues with the description (inconsistencies, factual inaccuracies, reproduciblity) or the choice of architecture
- 0/4 Unclear description of the type(s) of neural network model that you will use, or a choice that is inconsistent with your problem.

Result (4 points)

At least one result / comparison between your working model and your baseline. You are not measured on how well your model is performing at this point.

For some problems, you will need a qualitative measure of the baseline rather than a quantitative one. Quantitative measures are preferred, but if you can make a case for a qualitative comparison, that's okay too.

- 4/4 Insightful, well-chosen measurements that illustrate how your model performs. The measurement can be quantitative or qualitiative.
- 3/4 Minor issue with the choice of measurements, or the way the result is presented.
- 2/4 Major issue with the choice of measurements, or misleading presentation of the results.
- 0/4 No result presented.

Discussion (4 points)

Discuss your results, including at least one set of training curves. Do you think your model is performing well? Base your discussion on both the results that you have shown, and the interpretation of your training curve. What issues, particular to your project, will you have to overcome?

- 4/4 Insightful interpretation of the results and training curve that is specific to your project. Exceeds expectations.
- 3/4 Sound interpretation of the results and training curve.
- 2/4 Some issues with the training curve (inconsistencies, factual inaccuracies, obvious errors in training)
- 0/4 Unclear descriptions

Project Progress (4 points)

Describe how your team is working together. Take a look at the divided tasks and deadlines you set earlier. How is each person doing? What has each person accomplished?

- 4/4 Good progress made, including completing data collection, building a baseline, and having a model that overfit. Progress is consistent with the Colab link or the project Github page.
- 3/4 Good progress made, including completing data collection, and building a baseline.
- 2/4 Team is making progress, but slower than expected.
- 1/4 Team is making progress, but much slower than expected.
- 0/4 Team is having a lot of trouble. Please speak to instructor.

Project Plan (4 points)

Revise your task divisions and deadlines as you see fit.

- 4/4 Plan provides enough detail about the breakdown of remaining tasks, internal deadlines, and team member responsibilities so that a new team member can replace an existing one and know roughly what their responsibilities are. Work is divided evenly amongst team members.
- 3/4 Plan lists the breakdown of tasks, internal deadlines, and team member responsibilities going forward.
- 2/4 Plan misses important tasks going forward.

Learning from TA (4 points)

Describe how what you learned from your progress meeting, and the changes you made to your project as a result.

- 4/4 Insightful reflection of the TAs suggestions, and demonstrated application of the feedback to further the project goals. Exceeds expectations.
- 3/4 Evidence that the learning from the progress meeting affected the project in some way.
- 2/4 Generic responses not specific to your project.

Structure, Grammar & Mechanics (8 points)

We are looking for a document that is easy to follow, grammatically correct, and well-written.

If you cite any work, please include a reference in the IEEE documentation style.

- 8/8 Clear, concise and well-written document. Exceeds expectations.
- 7/8 Well-written document that could be more concise or less error-prone.
- 6/8 Well-written document that has some issues with grammar, mechanics, or structure. Meets expectations.
- 5/8 Reasonably-written document with grammar, mechanics, or structural issues.
- 4/8 Document has many issues.