1. **Final Video** (5 minutes): The final video is due on **Jun 3**. The final video is a 5 minute video presentation of your project. In the video, you should briefly describe the motivation, problem definition, challenges, approaches, results, and analysis. You should include diagrams, figures and charts to illustrate the highlights of your work. If possible, try to come up with creative visualizations of your project. These could include system diagrams, more detailed examples of data that do not fit in the space of your report, or live demonstrations for end-to-end systems. The goal of the video is to convey the important high-level ideas and give intuition rather than be a super-detailed specification of everything you did. Use lots of diagrams and concrete examples, and avoid slides that are too wordy or have extremely complex equations.
2. **Final Report** (5-10 pages max): The final report is due on **Jun 3**. Your final report should be a comprehensive account of your project. This final report structure is very similar to the progress report, except we would like to see some new results, experimentation and/or analysis, and a Future Works section. Below is a full description of what you should include in your project final report.
   * **Introduction** - Brief overview of your problem. Why might this problem be important?
   * **Literature Review** - Description of other work/papers you've found that are related to your task. Just mentioning a paper is not sufficient; you should at least go into brief detail about what kind of approach they are using/how it relates to your work if it's not immediately clear. Please also mention why your work relates or differs from these related works.
   * **Dataset** - Description of data you are using - size of dataset, distribution of classes, any preprocessing you needed to do
   * **Baseline** - Description and implementation of your baseline. For this report, you don't need to go too much into detail, but please still include some details.
   * **Main Approach** - Propose a model and an algorithm for tackling your task. You should describe the model and algorithm in detail and use a concrete example to demonstrate how the model and algorithm work. Don't describe methods in general; describe precisely how they apply to your problem (what are the inputs/outputs, variables, factors, states, etc.)?
   * **Evaluation Metric** - Please include what metrics, both qualitative and quantitative, you are using to evaluate the success of your problem. If relevant please include equations to describe your metrics.
   * **Results & Analysis** - At this point, you should have expanded on your approach from the progress report. Please include the performance of your baseline as well as the performance of your main approach so far and any experiments that you have run. Also, include an analysis of your results, and how this might inform your next steps in fine-tuning your main approach. The analysis is very important, and it requires you to think about what your results might mean.
     1. Baseline - 45% - 67%
     2. Resnet - 66-77%
     3. Add a small section on comparing ResNet18 to other models
   * **Error Analysis** - Describe a few experiments that you ran that show the properties (both pros and cons) of your system. Analyze the data and show either graphs or tables to illustrate your point.What's the take-away message? Were there any surprises? Use these experiments in the error analysis to describe potential errors in the method and why they may have occurred.
   * **Future Work** - We are requiring this section this time. This section can be short, but please include some ideas about how you could improve your model if you had more time. This can also include any challenges you're running into and how you might fix it.
   * **Ethical Considerations** - Provide a 1-2 paragraph statement outlining at least one ethical issue or societal risk specific to your project, with an explanation of what in particular connects your project to the ethical issue(s) or societal risk(s) raised. Subsequently, you also need to explain at least 1 possible mitigation strategy for each of those issues (e.g. technical modifications, policy changes, or specific model deployment measures). Note that you are not required to implement these mitigation strategies in your final project.
     1. Using images without explicit consent from the people in them or the organization the picture belongs to.
   * **Code** - Please include a link to your Github/Bitbucket/etc. For private repos, make sure to communicate this with your mentor and get their Github ID to add to your repo. If you choose to upload a zip, you can choose a subset of the data to upload so that its size won't be too large.
     1. [CS221 Project](https://colab.research.google.com/drive/18FOX9S4ahBzw19vThQr-_6lnCNt6nF4f?usp=sharing)
     2. Link to Final Dataset (not complete yet)
   * **References** - Please include a reference section with properly formatted citations (any format of your choice).

Note: you can have an appendix for each of the assignments the beyond the maximum number of allowed pages with any figures, plots, or examples that you need. References do not count for the page limit.