

## Topics for the nbgrader 2019 Edinburgh hackathon

### Student database

- It would be nice to have student emails and names in the nbgrader database.
- (4) It would be nice to be able to copy grades from nbgrader to mycourses with one command. For example, `nbgrader publish assignment_name`. I think it is possible to access the moodle database programmatically.
- It might be possible to copy the feedback to moodle. Feedback is an html file.

### Assignment deadlines

- (4) The students do not see the deadlines of the assignments. It would be nice to show the deadline (maybe in the Assignment tab).
- (2) Now the deadline (in Formgrader tab in the instructor view) is set and displayed in UTC. This is very inconvenient. It would be nice to have the deadline in local time.

### Where to solve assignments

- (5) Is it possible to have exchange folder on a remote host? This way students could fetch/submit assignment from their computer.

### Validation and submission

- (4) If a student submits a notebook without meta-data or with duplicate cells, does validation report these problems? Perhaps for duplicate cells only. Can we automatically generate feedback that your submission cannot be autograded?
- (2) Many students forget to click Submit button. It would be nice if students could see whether they submitted or not.
- (3) The students do not see the version that they submitted. It would be nice to let the students open their submission. (and maybe see git diff to their current version).
- (5) Can students request autograding (say min 3 times) to know how many points they will get? I am not sure I want to use this feature though. Students, of course, really want this feature. (RD: my idea is this stays in the domain of A+)

### Submission deadline

- (2) How to implement the following policy for late submissions: half points if submitted after the deadline but before the feedback is released. Zero points after that.
- (5) Some student may miss the deadline but they still want to solve assignments and get feedback. (a button: Request feedback).

## Grading

- (4) Currently: the latest submission is evaluated. We may want to evaluate **the last submission before the deadline** (if late submissions get zero points). (Aplus)
- (3) There seems to be a bug in autograing. When the assignment cannot be autograded (e.g. due to duplicate cells), nbgrader sometimes exits with an error message instead of skipping the problematic submission. In this case, one has to remove the problematic submission and run autograding again. This is inconvenient.

I have examples of such problematic cases:

```
[AutogradeApp | WARNING] Removing failed assignment:
/course/autograded/saarinv11/4_conv
[AutogradeApp | ERROR] One or more notebooks in the assignment use an old
version
    of the nbgrader metadata format. Please **back up your class files
    directory** and then update the metadata using:

    nbgrader update .
```

- (1) How to run autograding on the background so that it does not stop when connection is lost? (`nohup command &`)?
- (1) By default, in the Manual grading form students' usernames are hidden. If the teacher wants to find a submission by username, s/he has to open usernames one by one. It would be nice to show all usernames with one click.
- (2) Save records of how long autograding takes. This may be useful information when understanding lessons later (especially when the distribution is non-gaussian).
- (2) Make it possible to overwrite manual grading. Currently: autograder will skip assignments that have been manually graded. Sometimes, it makes sense to overwrite manual grades.

## Analysis of results

- (3) It would be nice to analyze points by autograding cells (to analyze what tasks were difficult).

## Feedback

- (4) Give teachers a way to copy the feedback (button: copy feedback or nbgrader command). If one publishes results through the exchange folder, then students have to know when the feedback needs an update

## Other

- (5) Port nbgrader Assignment List extension to JupyterLab
- (5) Port nbgrader Formgrader extension to JupyterLab

- (2) Script to automatically remove cached submitted assignments from  
.home/.local/share/jupyter/nbgrader\_cache (perhaps this is mostly a local issue)
- ~~(2) nbgrader: warn if dotfiles in assignment directories, don't copy them to students,  
exchange, or wherever.~~
- (3) Be less strict with metadata. Don't fail if Python version (or other software versions)  
change. (MOREINFO: how does it actually fail? I don't see this)
- Nbgrader is very picky about cell IDs, it is hard to continue to improve assignments  
during a release...
- UI to use the "flag" feature in the manual grading interface. Could be useful to be able to  
come back and process things