CSE306 Software Quality in Practice

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Today

- What will LPR be like?
  - LEX20
  - LPR review

- POST will be posted this evening
## End-of-Semester overview

<table>
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<th>M</th>
<th>T</th>
<th>W</th>
<th>Th</th>
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<tbody>
<tr>
<td>LPR practice</td>
<td>Lab time: work on project</td>
<td>Make (implicit rules, etc)</td>
<td>LEX20</td>
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<td>Memory leaks</td>
<td>LPR1</td>
<td>gdb</td>
<td>LPR2</td>
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<td>Tools in other languages</td>
<td>Lab time: work on project</td>
<td>External libraries</td>
<td>Lab time: work on project</td>
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Process results

1. Create repo (and use as needed)
2. Make trello, populate w/ discrete tasks
3. Write functions, stub out, make blackbox tests
4. Run tests, they fail. Implement functions
5. Run tests to see what fails
   If they all pass, run valgrind to check for leaks
   Otherwise, use gcov (assuming it all works), write more tests
6. If they fail, find out why with gdb
Process results

Start Repo
- Trello/assignments
- Makefile, Unit test file
- Test given functions
  - i.e. Create, OpenTable(n) etc......
- Use Results from given functions to see if a move(m,n) is possible

6. Test again

7. Deep bug with tools if needed
   - i.e. Valgrind/vald6
Process results

1. Create repo/add people
2. Trello creation/assign roles and tasks
3. Create directory/clone git
4. Make test for each function and corner cases
5. Start coding/and test after each function
6. Test again

functions
possible
Process results

Steps:
1. Make Repo on bitbucket
2. Make Trello
3. Make a makefile
4. Stub out functions
5. Create a Test file,
   Blackbox test functions
   given
6. Create appropriate
data structures
   (Stacking blocks using
   linked list)
7. Implement functions
   w/ whitebox testing
8. Maybe good, etc.
Process results

Steps:
1. Create repo → branch off
2. Create trello board
3. Create test, .h, .c, makefile
4. Write tests
5. Stub out functions
6. Test
7. Write functionality
8. Test
9. Write functionality
Process results

1. Create Repo
2. Stub out funcs.
3. Blackbox Test
4. Makefile
5. Code create
6. Code onTable, open, ON, above, Move
7. Whitebox Test after each
8. Use gcov
9. Use Valgrind & gdb for leaks and failed tests
10. Trello

commit frequently
Process results summary

Create repo .git trello

Set up Trello board trello

add/ refine task(s) for board

make makefile / Stub out functions / blackbox test

implement compiler \ debugging gdb Valgrind

whitebox testing gcov

performance testing gprof