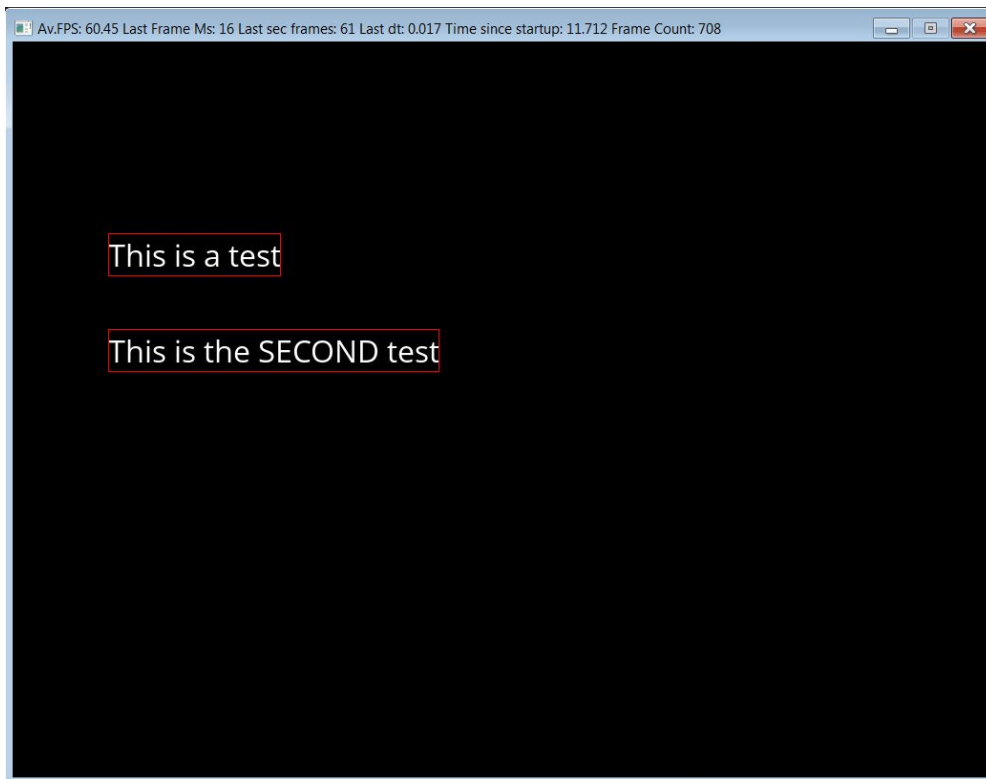


Game Development - Final Examination - 11 Jan 2016

- You have 2 hours to complete the assignment.
- There is a *solution.exe* that contains the expected results.
- If the code does not compile, it won't be accepted for submission.
- All the exercises add up to 13 points. Still the maximum grade is 10.
- Add a comment “// **EXERCISE X**” where your solution code is created.
- When you finish, ZIP the folder with a filename called “**lastname_name.zip**” and upload it to “**Final Exam**” folder.

1. **(2 points)** Add a new method in the filesystem module that allows creation of new directories. Make sure it notifies potential errors (physfs does not detect if the directory already exists).
2. **(1.5 points - bonus if you created a console)** Add a new command “*mkdir new_dir*” that creates a new directory.
3. **(4 points)** Make that new UI labels can be created from the config.xml file (with at least text, position and draggable flag). Then replicate this simple scene:



```
<scene>
  <ui_label x="100" y="200" drag="true">This is a test</ui_label>
  <ui_label x="100" y="300" drag="true">This is the SECOND test</ui_label>
</scene>
```

4. **(4 points)** Make that *all draggable UI* elements save and load their positions.
5. **(1.5 points - bonus if you created a console)** Add a new command “*save filename*” and “*load filename*” to the console that saves and load from specific files.

You can visit those websites to check documentation: <https://icculus.org/physfs/> | <http://pugixml.org/>