Project Log

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Introduction

This document contains the log of activities and hours spent on the individual project for the course individualProject for Avans.

In this course the student needs to make a project that incorporates the graphical card to do some calculations. The student needs to use OpenGl or OpenCL to do this.

Goal

The goal for this projcet is to use openCL to make a fluid simulation where water can be defined in a square space and the graphics card then calculats how the water flows. The focus first will be to make this in 2 dimensions. If this is done and there is time left the project will be expanded to 3 dimensions.

Log of Activities

1. **Read brightspace and init project**

   - **Activity** Read the brightspace course
   - **Activity** Setup code environment
   - **Activity** Setup git repository
   - **Activity** Write template for this log

2. **Google what is OpenCL**

   - **Activity** Read OpenCL landig page
   - **Activity** Read What is OpenCL

3. **Google openCL tutorial**

   - **Activity** Found getting started linux and followed part of tutorial with own knowledge to see if my envirement on new arch linux is working correctly.

- **Activity** Installed openCL headers
- **Activity** Followed Arch wiki to install openCL
- **Note** First program did not work. Had to google around and after rereading Arch wiki found I also had to install opencl-cover-mesa package isntead of only openc-nvidia.
- **Note** Added user to the video group using "sudo usermode -aG video sean", not sure if this was necessary

4.

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Hours Spent

#	Activity	Hours
1	Read brightspace and init project	1
2	Google what is OpenCL	0.5
3	Read OpenCL documentation	2
Total Hours		4

Results

- Learned the basics of OpenCL.
- Understood how to use OpenCL for parallel computing.