

Preliminary Class Diagram

for

Oil Field Monitoring

Programming Assignment 1
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Class Descriptions

- Simulation/SimulationMain
 - Handling the initialization of the simulation
 - Instantiates the simulation objects
 - Starts the program
- Server
 - Handles messaging functionality between data parser, simulation, and output
 - Manages clients that are “subscribed” to parts of the data feed
- Display
 - Outputs formatted data to the user
- Wells
 - Model of the well and the sensors it contains
 - Contains relevant well data
- Sensors
 - Handles passing of data to Server
 - Executes call for update of data
- HoleDepth
 - Generates and reports data
- ROP
 - Generates and reports data
- BitDepth
 - Generates and reports data
- PumpPressure
 - Generates and reports data
- CasingPressure
 - Generates and reports data
- TorqueMax
 - Generates and reports data
- FlowOut
 - Generates and reports data
- MudPitVolume
 - Generates and reports data

UML Class Diagram

