## **OpenGL TTF Renderer Demo**

This prototype demonstrates how to render True Type Fonts (TTF).

You can find presentation video here.

You can find repository here.

#### How to Use

Thanks to ImGui user can dynamically add texts, edit position, color, blur amount, text shadowing. User can also activate a cool RainCode demo to measure performance or font rendering quality.

## Running of the Prototype

To run the prototype, go to bin folder and double click on the executable. All necessary TTF fonts should be already inside of the bin folder, please do not delete them. After launching the bin, you will be able to edit TextLines dynamically from ImGui.

## Compiling of the Prototype

To compile the prototype, repo contains all the static library without a NuGet package independency. Refer to the "external" folder.

# **Prototype Software Architecture**

- Application Entry Point (main)
  - o Render and Control ImGui with Static Variables
  - o Calls to TextManager Render and Update in the Main Loop
- TextManager Singleton
  - Holds TextLine Instances
  - Call to Render TextLine Instances
  - Update TextLine Instances
  - Controls fontStash library
- fontStash
  - Produces Pure Render Draw (Font Quads) Data and Texture
- FontImplementation (Header File)
  - Renderer Backend Implementation For fontStash

- o Renders and Updates Draw Data Produced by fontStash
- o Controls ShaderProgram
- ShaderProgram
  - o Loads and Compiles Fragment and Vertex Shaders