2025-1 Computer Graphics

PA 3

1 Display multiple 3D models with textures. [5 pt]

1.1 Load **three** different 3D (low-polygonal) models from OBJ files.

1.2 Apply a different texture for each model.

1.3 Do **not** use simple primitives such as cube, cylinder, pyramid, sphere, etc.

1.4 Self-rotate(자전) each model continuously against the up (y) axis.at different positions.

1.5 All models should be displayed without **any hole**.

2 Display a ground plane with a texture. [2 pt]

2.1 Create a plane model by loading from an OBJ file or specifying vertices.

2.2 Find and apply a **patterned** image for a texture.

2.3 Set up the camera such that the plane represents a ground with horizon.

3 Display two filtering effects using keyboard inputs. [3 pt]

3.1 **3, 4**: show the linear and anisotropic filter mode

3.2 The visual differences should be **clearly** displayed between two modes.

- **Implementation requirements**
  - ✓ The program should be executed in a **x86 (32-bit) Release** mode.
  - ✓ The framework classes can be modified but can**not** be deleted.
  - ✓ All implemented functions should be executed from the **same** program.

- **Submission instruction**
  - ✓ 프로그램 build에 필요 없는 **폴더(Debug, Release, ipch) 및 파일(*.db)**은 모두 **삭제**.
    (*폴더 보기 → 표시 → 숨김 항목 → .vs 폴더 → ipch 폴더 및 *.db 파일 삭제)
  - ✓ 필요한 설명이 있으면 "**readme.txt**"에 기술.
  - ✓ 프로젝트 폴더 전체를 압축(**ZIP**, 제한: **20MB**) 후 **ClassRoom**에 제출 (*E-mail로 받지 **않음**).

- **Cautions**
  - ✓ **Visual Studio 2022 (DirectX 11)**에서 source code가 build 안되거나, 프로그램 실행이 안되면 **0점** 처리.
  - ✓ Source code의 copy시 원본 제공자와 복사자 모두 **0점** 처리.
  - ✓ 제출 시간 지나면 **0점** 처리.