**CS535 Computer Graphics**

**Homework Assignment 8 (40 points)**

**Due date: 12/09/2024**

1. Can ray tracing reproduce texture of a surface? Justify your answer. (10 points)

1. Why perspective correction is necessary when doing texture mapping? How should it be done? Your answer should address two issues here: 1. Theoretically, how can it be done? 2. Practically, how should it be done efficiently? The term "efficiently" means the process is so efficient that it can be integrated with the triangle rasterization process without changing its performance much at all. (20 points)

1. Answer the question "Are correct\_s and correct\_t integers?" on slide 107 of the notes “Texture mapping II”. Justify your answer. (10 points)

* Solutions must be typed (word processed) and emailed to me both as a pdf file and a word document before 23:59 on 12/09/2024.
* Please name your files as:

CS535\_HW8\_2024f\_LastName.docx / CS535\_HW8\_2024f\_LastName.pdf