# $CS5310\_assignment7$

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#### Abstract

This report presents the assignment 7 of the CS5310 course. It includes four chapters, each demonstrating various concepts with accompanying images.

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## 1 Chapter 1

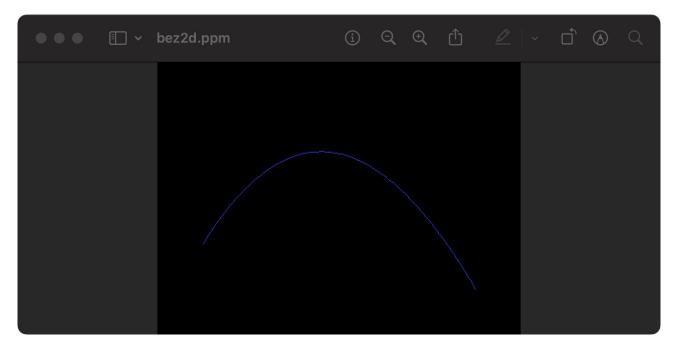


Figure 1: Description of the image in Chapter 1

#### 2 Chapter 2

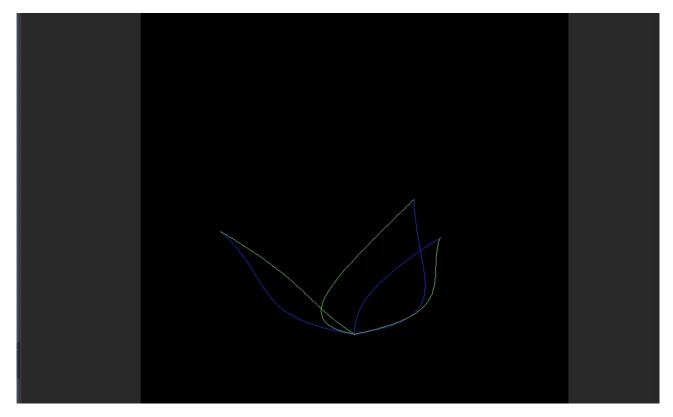


Figure 2: Description of the image in Chapter 2

you can visit the project 2 video at this link(click here).

#### 3 Chapter 3

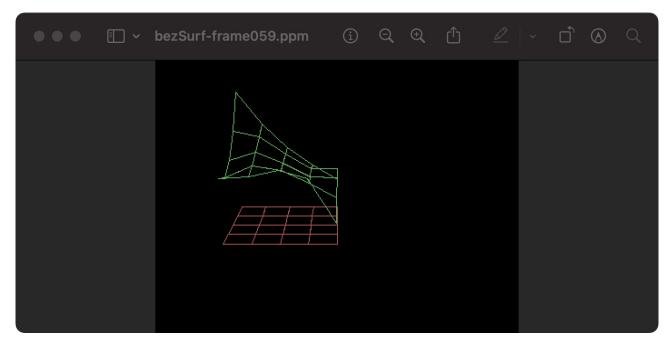


Figure 3: Description of the image in Chapter 3

you can visit the project 3 video at this link(click here).

## 4 what I do and leanrt

I encapsulated the test file in qt to make it dynamic, and I can always add post-processing anti-aliasing or not.

This assignment focused on the implementation of Bezier curves and surfaces, most of the equations had been implemented in previous weeks so they were not too difficult, for example, the use of polygon fills for surfaces significantly reduced the difficulty. But this week I did something big. I took the txt of all the previous test files and fixed about 10 bugs. The C pointers are really complicated, and I really learnt a lot. So many little problems with poorly handled pointers, and it was sincerely rewarding.

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