

Homework 3

- Implement a program that renders the following image under the **perspective** projection
 - Use polygons to render 國立中興大學 and the logo
 - Use triangles to render National Chung Hsing University
- Each color and vertex of above polygons and triangles are manually defined by yourself



National Chung Hsing University

Homework 3

- As your homework 2
 - Use vertex arrays to store your vertex and color data
 - You also need to use interleaved arrays to store your vertex and color data
- **glutKeyboardFunc**
- Keyboard 1
 - Use **glDrawArrays()** to draw polygons stored in **vertex arrays**
- Keyboard 2
 - Use **glDrawElements()** to draw polygons stored in **vertex arrays**
- Keyboard 3
 - Use **glMultiDrawArrays()** to draw polygons stored in **vertex arrays**
- Keyboard 4
 - Use **glMultiDrawElements()** to draw polygons stored in **vertex arrays**

Homework 3

- Keyboard
 - W - Move forward
 - A - Move left
 - S - Move right
 - D - Move backward
- Mouse right click - Rotate the scene by x-axis
- Mouse left click - Rotate the scene by z-axis
- Mouse middle click - Rotate the scene by y-axis
- **glutIdleFunc**
 - NCHU icon
 - Automatically rotate
 - Automatically change color



Homework 3

- The content of the image should not be clipped
- Hint
 - You may need to create a **larger** view volume under the orthographic projection
 - Be sure to use **Visual C++ 2015** for coding
 - Otherwise **0**
 - Be sure to include glew and glut libs/dlls in your project
 - Otherwise **0**
- **Always Copy = Delay = 0**

- Deadline: 4/17 23:30
- TA廖宜聖
 - g107056049@mail.nchu.edu.tw
 - Upload to iLearning
 - Zip the whole project and remove complied files!
 - Otherwise your grade will be deducted by 10 each
- Title
 - 成圖技術與應用第3次作業_學號_學生名.zip
 - WindowsProgramming_3rdHomework_student number_student name.zip
 - Otherwise your grade will be deducted by 5
- In the source code, you need to add the identifications below
 - Otherwise your grade will be deducted by 20

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