## Hacettepe University Computer Engineering Department BBM 414 Computer Graphics Lab. Experiment 1

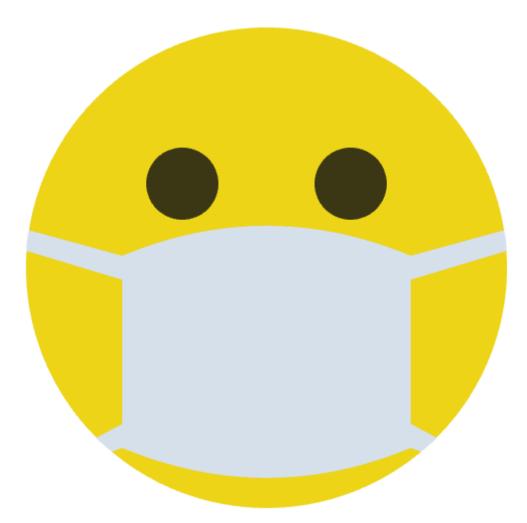
**Subject:** WebGL2 canvas and simple drawing **Submission Deadline:** 25.10.2021 23:59

Advisors: Asst. Prof. Dr. Ufuk ÇELİKCAN, T.A. Zeynep BALA

## Tasks

You will need to perform the required steps below:

- Using WebGL2, create a canvas.
- Implement gl's drawing function to draw the requirements below.
  - Draw a yellow emoji with a mask on a white background. The end result is supposed to look like the figure below.



• The mask will have arcs with its strings. Use **Bézier curve** to calculate the arc points.

## **Notes and Restrictions**

- Implement your homework using **WebGL2**. All programming assignments must use the shader-based functionality of **WebGL2**: at least one vertex shader and one fragment shader.
- The assignment must be original work. Turning in someone else's work, in whole or in part, as your own will be considered as a violation of academic integrity. Please note that the former condition also holds for the material found on the web as everything on the web has been written by someone else. Detection of such plagiarism in a submission will automatically void the submission and establish grounds to trigger an official disciplinary investigation. General discussion of the assignment among peers is allowed, but do not share answers, algorithms or source codes. Also using other resources (example source code, book, webpage etc.) as a code and javascript libraries (except jquery, Angel's book) are not allowed.
- Do not write the scripts into the html file. Reference your scripts in html file.
- Style and appropriately commented code matter.

## Submission

- You should submit entire Netbeans or Webstorm project directory including javascript files and html file in a zip file extracted from IDE.
- Submission file structure is as given in below:
  - <student number>.zip
  - |---Experiment1\_2020 (The whole Netbeans or Webstorm project)
- You should upload your files via "Online Experiment Submission System" which is at http://submit.cs.hacettepe.edu.tr
- Do not submit any file via e-mail.
- No submission will be accepted after deadlines.