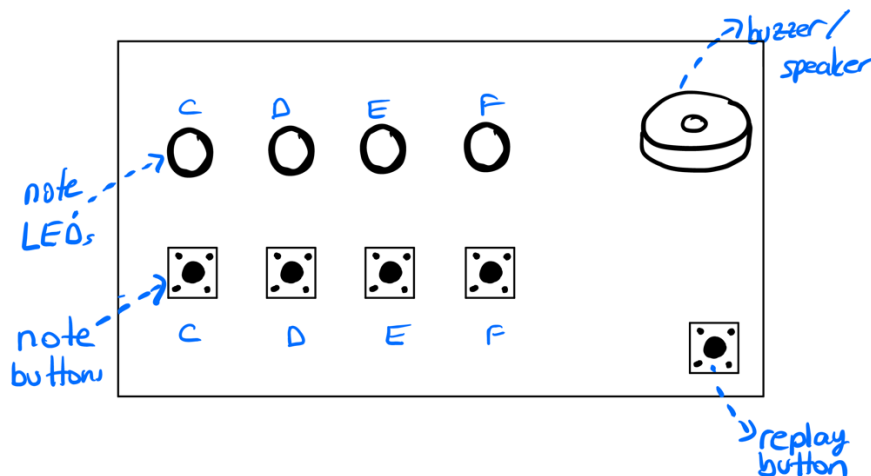<mark>Due Date: Feb 18, 2019</mark>

Important: This is a <u>group</u> assignment. Each group can have at most three members. Please email me the team name and team members by Tuesday February 5ᵗʰ.

Arduino Keyboard

In this assignment, you are asked to design and develop a tone keyboard accessory using Arduino Uno.

Here are the functional requirements of the device:
- Each note button represents a music note and each led is associated with a note button
- Once a note button is pressed, it generates the tone for that note using speaker/buzzer and also turn on the corresponding LED
- As the user presses buttons, the device needs to store the notes
- When the user presses replay button, the device replays the song and turns on LEDs as it plays

Extra 10-Point
- Attach a LCD display and prints the notes as the user presses note buttons

Submission:
Each team needs to make a demo. The schedule for demo sessions will be announced. Each member will be asked individual questions. In addition to that, each team is asked to create a youtube video for explaining their devices.

Hint:
There is a tutorial that helps you to setup a tone keyboard. I would suggest you to start working with this experiment.
https://www.arduino.cc/en/Tutorial/toneKeyboard