# Project Report

* **Project Name:** The Tabla Simulator
* **Introduction:**

Our project is a simulation of Tabla. A Tabla is an Indian Classical musical instrument, which can play some melodious soothing sounds when its bols are played in a rhythmic pattern. Our group, being a music enthusiastic, decided to choose this instrument as our topic because we want to keep this ingenious instrument’s tradition alive in this digital age.

* **How to use ?:**

Bols of Tabla can be played by pressing keyboard keys.

For example, Bol- ‘Ghe’ of Bahiya can be played by pressing key ‘W’. All keys corresponding to the Tabla Bol will be displayed on the screen, working as a user guide.

|  |  |  |  |
| --- | --- | --- | --- |
| Dahina | | Bahiya | |
| Key | Bol | Key | Bol |
| W | Ghe | L | Ta |
| Q | Ke | K | Na |
| D | Style\_Ghe1 | I | Ti |
| S | Style\_Ghe2 | O | Ra |
| A | Open\_Ghe | P | Tun |

* **Project Requirement:**

To implement this project idea, our team required basic knowledge of JavaScript, CSS and HTML. Also, knowledge of Tabla Bols (Notes/Syllables) and the knowledge of Git & GitHub for project initiation and submission. We required audio files of the Tabla Bols.

* **Logic Implemented in the Project:**

We used various tools and functions of canvas and canvas.js for making the whole project. For example, for adding audio files of Tabla bols to the keys, we made use of the function ‘canvas.keyDownCallback’ to assign music of a specific Tabla bol to a particular key.

* **Challenges faced:**
  + While implementing our idea, we faced a difficulty of including the audio files in our script. (Which the Zense Members helped us out)
  + Another challenge was to give a different colour to each concentric circle of the Tabla. The problem was that the whole circle was getting the same colour.

(Eventually, we found out a site on the internet which helped us)

* **Conclusion:**

We got a good experience in Web-Development and an exposure to the Canvas API. During this process we came across various problems and dealt with them with the help of Google and ever-friendly Zense Members. Their support in this journey made it more joyous and cheerful. Also, we learnt some important lessons while working on a group project like Team co-ordination, work-distribution, etc.

* **References:**
  + We have used background image from <https://pngtree.com/back/down?id=MTA1Mzg1OQ==&type=1&time=1616317955&token=MWQ3ZGViNzY2NGZkMzk5Mjc3YTY2OGExZGNhZmU2MGU=>
  + <https://www.youtube.com/watch?v=qoSksQ4s_hg&list=PL4cUxeGkcC9i9Ae2D9Ee1RvylH38dKuET>
  + <https://www.youtube.com/playlist?list=PL4cUxeGkcC9i5yvDkJgt60vNVWffpblB7>
  + <https://flaviocopes.com/canvas/>
  + <https://www.w3schools.com/graphics/canvas_intro.asp>
  + For Tabla Bols: <https://freesound.org/people/mmiron/packs/8162/>
* **Team:** ***tHE\_epic\_BYTE***
* **Members:**
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