**Content of my web page:**

The content of my website will revolve around introducing my current graduate project to the public: deciphering the molecular mechanism of circadian rhythm – its history, application, and state-of-art discoveries. It has been noticed for a while that biological scientists are generally not doing a good job at introducing and promoting their discoveries to the public. One of the reasons is that despite all these money putted into doing researches, not enough resource is spared for building an introductory-level media for regular people to better understand these topics. To deal with this issue, building a website with not only documentary introduction but also animation, interaction, and video instruction will be the most efficient and economical way to convey and spread biological ideas. To this purpose, I will organize my current research topics into a public website. This website will include introductory level information presented as figures, videos, and animation for general people to better understand the ideas behind biological circadian rhythm. In addition, this website will also include in-depth database that allow scientists to retrieve the genome-wise data they need or communicate ideas.

**Technical features:**

* HTML pages that validate will be used to describe the document content. The page layout should be clear and easy to understand. HTML elements will be used to arrange page content into different sections.
* Cascading Style Sheets will be used to enhance the style and design of this page.
* JavaScript front end form verification will be adopted to validate input information from users. There will be interactive sessions in this web page that allow users to leave their comments or inquiries. The script will verify their inputs to make sure that they are digestible.
* Dynamic HTML features will also be included to make the documentary content more vivid.
* PHP script will be used to process form data from users. Users can inquire more information by sending a list of gene names. The input will be compared with gene list in the database and the selected information will be organized and presented on the browser.
* Set and read cookies with JavaScript from users. The information collected can be further analyzed to determine the characteristics of viewers as a way to improve web page design for targeting group.
* MySQL database will be used to store user information and user comments.
* PHP will be used to interface the MySQL database.
* The web page will also include other related websites for further information. Links to video files that provide supplementary information will also be included.
* Include AJAX application

Title for Project : Introduction to state-of-art discoveries on biological clock – an interactive website

Group Name:

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Course: CS 329E - Elements of Web Programming

Instructor: Dr. Shyamal Mitra

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