PSG COLLEGE OF TECHNOLOGY, COIMBATORE - 641 004

Department of Applied Mathematics and Computational Sciences II MSc SS - Package Abstract

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Package Title	coEdit (A Collaborative Text Editor)

ABSTRACT

Co-Edit is a real time collaborative editor scalable to any number of simultaneous real time users. One of the difficulties when we work in a group is to team up in a proficient manner. Additionally, working from a distance with a group is a bad dream particularly when we make a report and conceptualize thoughts. From this point of view, building a real time collaborative text editor was conceived

Highlights:

This project uses websockets to establish communication (basically send and receive updates) between a server (implemented using nodeJS) and a client (implemented using reactJS) using cross origin resource sharing (CORS).

The documents are identified by the documentID which also acts as the roomID for a group of users to be able to make changes to the document that is open with them.

Any changes made by a user are communicated to the server which in turn broadcasts it to the other users/clients that are accessing the same document (are in the same room).

Other features supported:

- Custom formats Formatting options expected of any conventional text editor like italicize, bold, text-alignment, etc.,
- Keyboard shortcuts Allows the users to edit documents using keyboard shortcuts like Ctrl+C for copy ,etc.
- Insert images Provides support for images within the document.
- Auto save The document is auto-saved every 2 seconds to ensure data is not lost.

Code:

https://github.com/tamjid1108/coEdit

Programming Language	JavaScript
Web Technologies used	HTML, CSS
Modules/Frameworks	socket.io, reactJS, nodeJS

Database MongoDB Atlas
