**Brrrgrrr: A Customizable Burger Ordering Platform**

**1. Abstract**

Brrrgrrr is a web application built using the MERN stack (MongoDB, Express.js, React.js, and Node.js) that allows users to create and order customized burgers. Users have complete control over their burger, selecting ingredients and adjusting quantities to suit their preferences. The platform dynamically calculates the total bill based on the chosen ingredients and their quantities. Additionally, users can access a detailed order history and a dedicated page showcasing nutritional information and pricing for all available ingredients.

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**3. Introduction**

Brrrgrrr addresses the desire for a user-friendly and personalized burger ordering experience. By leveraging the MERN stack, it provides a comprehensive platform that caters to individual preferences for burger customization and bill transparency.

**4. Existing Methods**

Several online burger ordering platforms exist, but some lack complete customization options, forcing users to choose from pre-defined options. Others may not offer real-time bill updates or detailed ingredient information. Brrrgrrr aims to bridge these gaps.

**5. Proposed Method with Architecture**

* Presentation Layer (Frontend): React.js is used for a dynamic and responsive user interface. Tailwind CSS facilitates rapid UI development with pre-defined utility classes.
* Business Logic Layer (Backend): Node.js and Express.js provide a robust backend framework for handling data management, order processing, and API communication.
* Data Layer (Database): MongoDB serves as the flexible database, storing user information, order history, and ingredient details with a schema adaptable to various data types.

**6. Methodology**

* User Interface Design: React components are used to build interactive elements for ingredient selection, quantity adjustment, order confirmation, and order history display.
* API Design: RESTful APIs are implemented for data exchange between the frontend and backend, enabling users to interact with the application and retrieve order details.
* Data Management: User data, order history, and ingredient information are stored and managed using MongoDB.
* Billing: The application calculates the bill in real-time based on the selected ingredients and quantities.

**7. Implementation**

* State Management: React Context API maintains application state, ensuring consistent and predictable data flow.
* Security: Secure coding practices are implemented to safeguard user information and prevent unauthorized access.

**8. Technical Stack**

* Frontend: React.js, Tailwind CSS
* Backend: Node.js, Express.js
* Database: MongoDB

**9. Additional Information**

* Live Site URL: [Brrrgrrr](https://brrrgrrr-frontend.onrender.com/)
* GitHub Repository: [Brrrgrrr GitHub](https://github.com/dharung07/Brrrgrrr)
* Name of the Student: Dharun G
* Domain of the Project: Full Stack Developer
* Duration of the Project: 1 Month
* Instamojo Payment ID: MOJO4721905Q21322402
* Contact Email: <mailto:dharung1503@gmail.com>

**10. Conclusion**

Brrrgrrr delivers a user-centric and dynamic solution for online burger customization and ordering. Its key features include:

* Extensive ingredient selection with quantity adjustment
* Real-time bill calculation
* Order history with detailed information
* Ingredient information page with nutritional values and pricing