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COMANDA PERSONALIZATĂ A PRODUSELOR DE
COFETĂRIE ÎN BAZA INTELIGENȚEI ARTIFICIALE
DEZVOLTAREA PLATFORMEI WEB

Proiect de master

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REZUMAT

Proiectul începe printr-o analiză detaliată a zonei de studiu, evidențiind importanța subiectului ales și realizând o analiză comparativă aprofundată a sistemelor analoge. Această fază servește drept fundament pentru delimitarea scopului și obiectivelor creării sistemului. Cerințele sistemului sunt abordate cuprinzător, incluzând scalabilitatea, extensibilitatea și criteriile specifice de funcționalitate. Este conturat un detaliat catalog al posibilelor eșecuri ale sistemului, împreună cu cerințe riguroase de proiectare pentru a ghida procesul de dezvoltare.

Faza de modelare și proiectare a sistemului se adâncește în detaliile comportamentale ale sistemului, structurare și stări de tranzacționare. Se oferă o privire de ansamblu holistică, însoțită de o examinare meticuloasă a scenariilor de utilizare a aplicației pentru a asigura o înțelegere cuprinzătoare a funcționalității sistemului.

Faza de implementare a proiectului este marcată de selectarea uneltelor eficiente, inclusiv unelte de dezvoltare, unelte de construcție, cadre de lucru și o bază de date robustă. Alegerea atentă a pilonului tehnologic pregătește terenul pentru un proces de dezvoltare fluent și eficient. Uneltele de dezvoltare sunt selectate cu grijă pentru a îmbunătăți experiența de codificare și a facilita colaborarea între membrii echipei.

Utilizarea uneltelor de construcție optimizează compilarea și ambalarea aplicației, asigurând o abordare sistematică și automatizată a procesului de implementare. Cadrele de lucru sunt folosite cu discernământ pentru a valorifica componente pre-construite și a accelera ciclul de dezvoltare. Alegerea unei baze de date fiabile este crucială pentru stocarea și recuperarea datelor, iar baza de date aleasă se aliniază cu cerințele sistemului.

Integrarea uneltelor de documentare și gestionare a codului este prioritară pentru dezvoltare fluentă și colaborare eficientă între membrii echipei. Descrierile modulelor la nivel de cod oferă o perspectivă granulară asupra procesului de implementare, asigurând claritatea și ușurința de întreținere.

Pe măsură ce proiectul trece la faza de documentare a produsului implementat, se elaborează o descriere meticuloasă a sistemului. Această documentație servește drept resursă valoroasă pentru părțile interesate, oferind insight-uri asupra arhitecturii sistemului, funcționalităților și aspectelor operaționale. În plus, se dezvoltă un ghid de utilizare pentru a facilita interacțiunea fără probleme cu produsul implementat.

În esență, proiectul cuprinde o abordare holistică, parcurgând fazele de analiză, proiectare și implementare. Valorificând o gamă diversă de unelte și cadre de lucru, documentarea meticuloasă a produsului implementat asigură o înțelegere solidă a sistemului și împuternicește utilizatorii cu un ghid cuprinzător pentru interacțiunea eficientă cu sistemul finalizat.

ABSTRACT

The project embarks on a thorough analysis of the study area, underscoring the significance of the chosen topic and conducting an insightful comparative analysis of analogous systems. This phase serves as the foundation for delineating the purpose and goals of creating the system. System requirements are comprehensively addressed, incorporating scalability, extensibility, and specific functionality criteria. A detailed list of potential system failures is outlined, along with stringent design requirements to guide the development process.

The modeling and system design phase delve into the intricacies of the system's behavioral description, structuring, and transaction states. A holistic overview is provided, accompanied by a meticulous examination of application use cases to ensure a comprehensive understanding of the system's functionality.

The implementation phase of the project is marked by the selection of efficient tools, including development tools, build tools, frameworks, and a robust database. This thoughtful choice of technology stack lays the groundwork for a smooth and effective development process. Development tools are carefully curated to enhance the coding experience and facilitate collaboration among team members.

The use of build tools streamlines the compilation and packaging of the application, ensuring a systematic and automated approach to the deployment process. Frameworks are employed judiciously to leverage pre-built components and accelerate the development cycle. The selection of a reliable database is crucial for data storage and retrieval, and the chosen database aligns with the system's requirements.

The integration of documentation and code management tools is prioritized for streamlined development and effective collaboration among team members. The code-level module descriptions offer a granular perspective on the implementation process, ensuring clarity and maintainability.

As the project transitions to the documentation phase of the implemented product, a meticulous system description is crafted. This documentation serves as a valuable resource for stakeholders, providing insights into the system's architecture, functionalities, and operational aspects. Additionally, a user guide is developed to facilitate seamless utilization of the implemented product.

In essence, the project encapsulates a holistic approach, traversing through analysis, design, and implementation phases. Leveraging a diverse set of tools and frameworks, the meticulous documentation of the implemented product ensures a robust understanding of the system and empowers users with a comprehensive guide for effective interaction with the finalized system.

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INTRODUCTION

Currently, innovation and technological solutions play an important role in various areas of our lives. The field of online trading and services continues to develop rapidly, and it is important to pay special attention to innovative approaches and the use of advanced technologies. Modern technologies make it possible to create more convenient, intuitive, and interactive platforms, which increases customer satisfaction and comfort level when interacting with a service provider. The use of the latest technologies allows us to tailor offers to the needs of each specific user. This increases the likelihood of making a purchase and increases customer loyalty. Innovative technologies facilitate the collection, processing, and analysis of data. This helps companies better understand consumer preferences, respond to changes in market conditions and make informed business decisions.

One promising area where significant changes can be made is in the confectionery products ordering process. This is driven by a growing interest in individual, unique products, as well as a shift in consumer preferences towards online orders. Due to these trends, there arises a need for innovative approaches that can meet the demands of modern customers. In this regard, creating an innovative platform for ordering confectionery products using artificial intelligence becomes an urgent task.

The implementation of innovations in the field of cake ordering not only meets consumer needs but also has a significant impact on the economy and sociocultural trends. The emergence of unique platforms for ordering cakes can serve as a powerful driver for business development and the creation of new opportunities for both entrepreneurs and consumers. Research into previous trends in online commerce and the use of artificial intelligence in the food industry underscores the importance of continuous development and adaptation. The findings from these studies serve as the foundation for innovative solutions in the cake ordering domain, enabling the delivery of an even more satisfying and personalized experience for the user.

The purpose of this work is to conduct an analysis and study of the sales of confectionery products to identify existing problems and limitations. Based on the data obtained, it is planned to develop a web platform that will provide users with ample opportunities to order confectionery products, both from the proposed catalog and with the possibility of complete customization, including the choice of filling, design, decor, size, weight and other parameters.

However, the key feature of this platform will be the use of artificial intelligence to simplify the ordering process and bring users' culinary fantasies to life. A special function based on machine learning algorithms will allow users to describe their preferences and wishes, and artificial intelligence will create an image of a confectionery products that fully matches their description. This unique solution will make the process of selecting and ordering confectionery products not only convenient, but also fun for customers.

The growing interest in individualized products, coupled with a shift in consumer preferences

towards online orders, necessitates innovative approaches. Unique platforms based on artificial intelligence not only address customer needs but also serve as powerful engines for business development. Research into previous trends in online commerce and the use of artificial intelligence forms the foundation for innovative solutions in the cake ordering domain, ensuring users an even more satisfying and personalized experience. All these factors collectively shape a promising direction that meets customer expectations, contributes significantly to business growth, and propels the cake ordering industry to new levels of modern standards and expectations.

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