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|  | GOVERNMENT OF KARNATAKA | Form No: |
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**Capstone project**

**Identification of Methodology**

Capstone project Name: College Student Management System

Capstone project Members:

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The **College Student Management System** is a web application that enables staff members to maintain student marks ,attendance & personal information The development team used the agile methodology for the development of this project.

**Agile methodology** is an iterative and incremental project management approach that is widely used for software development projects. The agile methodology involves breaking down the project into small and manageable parts, known as sprints. Each sprint has a defined duration and is focused on delivering a specific set of features. The agile methodology used for the student management system project involved the following steps :

1. **Sprint Planning:**  
   The first step in the agile methodology was to plan the sprint. A sprint is a fixed duration of time during which a set of features is developed. The sprint planning involved identifying the features to be developed during the sprint, defining the scope, and estimating the effort required to complete the features.
2. **Sprint Execution:**  
   The second step in the agile methodology was to execute the sprint. The sprint execution involved developing the features identified during the sprint planning. The development was done using the Java full stack development, which involves using Spring Boot, Thymeleaf, MySQL, Amazon EC2.
3. **Daily Stand-Up Meetings:**The third step in the agile methodology was to hold daily stand-up meetings. These meetings were used to discuss the progress made during the sprint, identify any roadblocks, and plan the tasks for the next day. The daily stand-up meetings ensured that the development team was on track and any issues could be addressed promptly.
4. **Sprint Review:**  
   The fourth step in the agile methodology was to conduct a sprint review. The sprint review involved reviewing the features developed during the sprint and seeking feedback from stakeholders. The feedback obtained during the sprint review was used to refine the features developed during the sprint and ensure that the project was on track.
5. **Sprint Retrospective:**  
   The final step in the agile methodology was to conduct a sprint retrospective. The sprint retrospective involved reflecting on the sprint and identifying areas for improvement. The feedback obtained during the sprint retrospective was used to improve the development process for the next sprint.

**Advantages of Agile Methodology:**  
The use of agile methodology for the Student Management System project provided several advantages. These advantages include:

* Flexibility: The agile methodology allowed the development team to be flexible and adapt to changes during the development process.
* Collaboration: The daily stand-up meetings and sprint review allowed for better collaboration between the development team and stakeholders.
* Faster Time-to-Market: The iterative and incremental development approach enabled the development team to deliver features faster, resulting in a faster time-to-market.
* Continuous Improvement: The sprint retrospective allowed for continuous improvement of the development process, resulting in a more efficient and effective development process.
* Customer Satisfaction: Continuous customer involvement throughout the development process ensures that the final product meets customer expectations.

**Conclusion:**  
The use of agile methodology for the Student Management System project enabled the development team to deliver a functional and efficient system. The methodology involved sprint planning, sprint execution, daily stand-up meetings, sprint review, and sprint retrospective. The agile methodology enabled the development team to deliver the project in an efficient and effective manner, with continuous feedback and improvement throughout the development process.

Date:

Signature of the student

Signature of the cohort owner