**Design decisions applied whole application**

* Object oriented software development methods

Reasons:

* Improved software maintainability.
* Faster development
* Lower cost development
* Improved software development productivity
* Higher quality software
* Three-tier client server architecture
* s more users access the system a three-tier solution is more scalable than the other solutions because you can add as many middle tiers as needed to ensure good performance.
* Security is also the best in the three-tier architecture because the middle layer protects the database tier.
* MCV Architectural Pattern

Reasons:

* It should interact with other machines or users effectively.
* For more efficient interaction system should have flexible interfaces.
* MVC can be taken as for a popular and easy to handle web application development style that has the feature of separating the presentation and intermediate logics.
* Ease to coding and provide well defined interfaces within each logic.