Research Paper   **Engineering**

Team Accelerator

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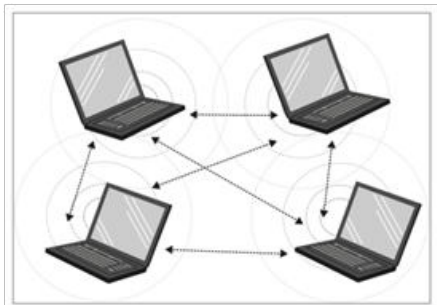
ABSTRACT

The traditional method used today in team working slows down project progress and indirectly degrades the efficiency and productivity of the team. Teamwork is the ability to work as a group toward a common vision. Team Accelerator' is an easy-to-use offline teamwork & project management software application that helps project managers and members, students, inter department colleagues to work together more productively and efficiently. This includes features like File sharing, Text communication, Milestones, Data pool concept, Auto synchronisation, Task management and Time tracking. Using today's popular windows ad-hoc network 'Team Accelerator' will be implemented in java language.

Keywords: Advertising approaches, advertising strategy, Advertisement Techniques, FMCG

I. INTRODUCTION

Wireless Ad hoc network nowadays gaining popularity in research area. Wireless network can be created with the help of Access Point (AP) or without AP. A network with AP is called Infra structure network. Ad hoc mode can be deployed anywhere easily without requiring major infrastructure. It is a decentralized network. Users are mobile in this network they can access data from anywhere. The major characteristics of wireless Ad hoc network are: Dynamic topology, easy deployment, limited bandwidth, limited battery power, lower data rates, higher error rates, higher delay etc. Topology of wireless Ad hoc network changes rapidly and re-organizes them-selves in an arbitrary fashion.

Traditional methods used today for file transfer use various devices (pendrives, HD's, etc) or mail but these methods are time consuming. This software provides effective utilization of existing resources and transferring files in less time with no extra effort. It is also possible to transfer file to multiple members at the same time.

A way of communication among team members is quite easy with the help of text communication instead of physically going to speak with other person.

There are different features added to enhance team working. This application is configurable to define the number of team members. The resultant benefits of software application may be seen in the following areas.

- Group productivity
- Team members updated with important dates
- Smarter way to manage data.

II. LITERATURE SURVEY

In a literature survey we came know some existing project management solutions which exist in market providing some features like online scheduling the project events, task managements, server side file storage etc. Problems with them are that they require internet connection to access application.

Centralized storage of all data may be risky sometimes, in case of hardware failure at server side. To overcome this drawback in Team Accelerator application data is present on hard disk of each team member's laptop.

With no cost of internet connection this software application is used on wireless Ad-Hoc network which can be used on every laptop without requirement of internet for data transfer.

In a survey we came to know that every student cannot afford internet connection so this application is suitable for students working for a project.

III. SYSTEM IMPLEMENTATION

Team Accelerator is the Java based application. This application gives way to work with group in systematic manner.

There are different features added to enhance team working. This application is completely configurable to define the number of team members. The resultant benefits of software application may be seen Group productivity , Team members updated with important dates, Smarter way to manage data.

SYSTEM FEATURES

1. TEXT CHATING:-
a) It provides a simplest way of communication.
b) It offers a real-time direct transmission of text-based messages from sender to receiver.
c) Online chat may address point-to-point communications as well as multicast communications from one sender to many receivers.

How does it work?
*   Compression – data is compressed.
*   Encapsulation – The digitized data is wrapped in an IP packet.
*   Routing – The packet is routed through the network to its final destination.

These steps happen in reverse at the other end.

2. MILESTONES:-
a) Helps to keep the project on schedule.
b) Project manager does the job of entering and updating the milestone.
c) Its shows detailed time required to complete the project.
d) Milestone is allotted to each project module that is its start and end date.

3. AUTO –SYNCHRONIZATION:-
a. Auto-Synchronization is a concept in which a file is automatically downloaded and saved on each laptop that is online on ad-hoc network.
b. It helps to keep all the project members updated.
c. It also keeps track of how much percentage of project is completed.

How does it work?
*   A common data pool is maintained to store the data.
*   Project member uploads a file and saves it in the data pool .
*   This file is automatically broadcasted to all the online members.
*   Each file is associated with the owners IP address.
*   And only the owners files are broadcasted.

Authentication

The basic validation strategy used is passkey (SSID) verification , where passkey has to be entered by user which is verified in connection setup phase. If it is not valid then connection is terminated otherwise it will go for further the authorization process. After the N/W connection is setup, Team Accelerator will ask for the username and password of the project member.

Performance Requirements

The proposed software can overcome the limitations of the extra hardware devices. The software provides proper authentication .It would reduce interdependency between team mates. This software will help the user to reduce the workload and mental conflict. This software will have a user friendly interface so that he/she can easily do his/her job without time lag.
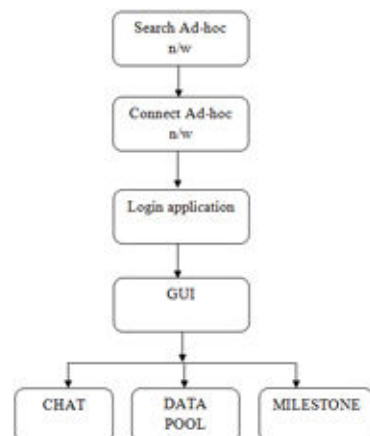
Expected Advantages of Software
*   Minimum time needed for the various processes.
*   Enhanced and Improved collaboration work.
*   Greater efficiency.
*   User friendliness and interactive.

Security Requirements
*   The software provides a unique username and password to each member of the project.
*   This protects the project from unauthorized access.

TECHNICAL ARCHITECTURE:

IV. CONCLUSION

Thus this paper shows that Team Accelerator will prove to be an important tool in increasing Group Productivity, active discussions and proper sharing of important files.

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