Specification Document
for
Virtual Workplace^{TM}

Prepared by
Technology Transfer Portal Team
Center for Software Development
BITS Pilani

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1   Introducing Virtual Workplace™

This document provides some basic requirements for the *Virtual Workplace™* to be integrated later with the knowledge landscape as a part of the Technology Transfer Portal (TTP). The *Virtual Workplace™* is a web based collaborative and messaging environment. The aim is to allow virtual functional groups working on a project idea/vision to collaborate seamlessly as if they were working in a real organization delivering project with strict deadlines. Thus the need is to simulate a *virtual company* working on a single project with strong project management and message exchange techniques.

The system shall provide the following functionalities in the bare minimum setup:

- Time Management (Calendaring, Task Scheduling).
- Contact Management (Address Book).
- Groupwork (Discussion forum and online chat rooms).
- Document Management (Virtual Cabinet and Versioning system).
- Project Management System.
- Email Management System (POP3/IMAP/SMTP Based email client).

1.1 Who Benefits From this?

The system should provide advances in "*Knowledge Worker*" productivity and network Performance. Anyway who benefits from this?

- **Information workers** get their work done more quickly because the system should work together to deliver consistently efficient access to personal business information independent of network characteristics. Mobile users find it easier than ever to stay up-to-date with the information flowing into their mailboxes no matter what device they choose to use.

- **Information technology (IT) managers** appreciate advances in administration, security, scalability, reliability, and built-in support for mobile computing that both lower the costs of managing an collaboration-based communications infrastructure and make it easier to deliver mission-critical messaging services.

A powerful communication and scheduling program, the virtual work environment improves the efficiency and makes it easier to collaborate with colleagues.

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2 Functionality Elucidation

2.1 Time Management

Calendaring and Task Management are the Time Management functionalities of the system.

2.1.1 Calendaring

A user will see his/her agenda in a convenient calendar which allows daily, weekly as well as monthly views. With the calendar a team member creates online meetings, personal/group appointments, event schedules, view groups schedules and also manage his/her calendar. A member publishes his/her calendar to other members of the group though; an appointment/event marked private must not be visible to the other members.

2.1.2 Task Management

The user can assign tasks to him/her. A task could be a repeating task on regular intervals (like attending classes☺). Hence provision must be made for providing functionalities to allow create such tasks. A user could also assign a task to another member in a team Contact Management.

2.2 Contact Management

2.2.1 Address Book

The system has facilities for providing users with personal addressbooks allowing them to store and retrieve their addresses.

2.3 Groupwork

2.3.1 Discussion Forums

In addition to shared calendars and tasks, the system provides functionality for online discussions. In-house discussions(within a project team) allow accelerated gathering of information and discussion of important issues without a need to call a meeting for each such issue, which results in improved efficiency.

2.3.2 Chat Rooms

The system also has chat rooms where members belonging to a particular project can join and interchange views, ideas and suggestions on a project, workflow, process or any other project artifact.

2.4 Document Management

2.4.1 Virtual Cabinet

Virtual Cabinet allows a user to share personal and project related documents. When a user uploads a document, he/she sets the visibility status as private or public (with respect to project group mates). Provisions are also provided for searching documents.

2.4.2 Versioning

A user can publish a project document to the group which could further be versioned using a document versioning system to be viewed by the group mates later. Whenever a member changes a document and versions it, he specifies a list of project members who need to be intimated at that point about this change and they are mailed automatically. Options to intimate all members must also be provided.

2.5 E-Mail

The user is provided with options for configuring the system to retrieve his/her mail server. The email system supports POP3/ IMAP protocols for receiving emails and SMTP for sending emails. Options are also provided for storing mail attachments onto the user's desktop or directly storing it in the virtual briefcase.

2.6 Project Management

The system provides project management capabilities like maintaining detailed project information, hierarchical task listing with priorities, Gantt charts, performance appraisal mechanisms, Timesheet, and detailed user management and resource based permission mechanisms. This is integrated with the rest of the system's functionality like task management, calendaring, virtual cabinet and others.

3   Some other requirements

1. The system is completely Web Based and requires you to develop and design the prototype in JAVA and **JAVA ALONE.**
2. We would appreciate if the project designers meet frequently with the TTP team at CSD to understand the system (u might not get them sometimes though☺).
3. Lastly we would like the team members to sign up a non-disclosure agreement with us to avail further information on the projects.

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