WASS: Web Appointment Scheduling System

Note: The following text assumes that WASS is being used in an academic context, and uses terms such as "student" and "professor" to refer to WASS users. WASS can also be used in a business context (as long as WASS can get to an LDAP or CAS-based authentication system), in which case terms such as "customer" and "staff" should be substituted.

Summary: The Web Appointment Scheduling System (WASS) makes it possible to schedule appointments over the Web. Using WASS, faculty, deans and others can create web-based calendars on which they indicate their availability for appointments. Students and others can locate these calendars on the web, find an available appointment time, and schedule an appointment.

The Problem: There are many situations where an individual wishes to publish their availability for appointments in a manner that allows other people to make appointments without directly contacting them. For example, a professor or dean or administrator may wish to let students know about his/her offices hours. An advisor may wish to let their advisees know about advising hours. An administrator may wish to let potential applicants know when they can make an appointment to discuss a job or other opportunity. In all of these scenarios, we have:

1) A person (or thing, e.g., classroom) that is available for appointments on specific days at specific times (or, in the case of office hours, on a specific set of dates and times).
2) People who wish to make an appointment to visit this person. These may be specific individuals (students enrolled in a course), or a specific population (anyone with a login userid), or anyone at all.
3) A desire to have the people making the appointments select an available date and time themselves, rather than having them arrange the appointment via email or phone conversations or scheduling exchanges.

Standard calendaring/scheduling software (e.g., Outlook, Ical) does not handle this situation well, because it has no way to allow people to specify limited availability. Standard calendaring lets you specify when you are busy, and assumes that if you are not busy, you are available for scheduling. What is needed is a system that lets you specify when you are available, and that assumes that you are busy at other times.

The Solution: WASS is designed to handle the above-described scenario. WASS allows the person making the appointment to add the appointment to a person's calendar, but only on dates and times that the person has specifically designated for such appointments. WASS can also be used to schedule meetings where the attendees enroll themselves in the meeting (as opposed to the standard calendaring solution, which requires that people be "invited" to the meeting).

WASS includes features that allow the calendar owner to restrict who may schedule an appointment, how many appointments may be scheduled, and by when (relative to the start of the appointment time) the appointment has to be made. It also includes a facility that will add appointments made in the system to a person's local calendaring application (e.g., Outlook).

WASS is entirely web based, and only requires a web browser to create and manage a calendar or to make appointments. WASS also includes a facility that allows a calendar owner to designate one or more calendar "managers", people who can manage a calendar on the owner's behalf. Lastly, WASS includes a notification/reminder facility that sends out notices of pending appointments via email.

Who May Use the System: Two sets of people use the WASS system: 1) people who hold office hours (people who are available for appointments); 2) people who make appointments with the office hours holders. We will refer to the first set as "calendar owners", and the second set as "appointment makers".

Anyone who can authenticate to the system (login) can be a calendar owner and can create and manage one or more calendars in the WASS system. Calendar owners are typically faculty members, deans and administrators (people who hold office hours), but students can create calendars as well (if they want to make themselves available for appointments). Appointment makers do not need to create a calendar in the WASS system. They simply look up the calendars of owners and make appointments with them.   A calendar only needs to be created if the person wants to make themselves available for appointments. When a calendar owner makes themselves available for appointments, they can restrict who can schedule appointments based on userid or on enrollment in a class (if the institution is running an LMS that WASS can talk to). They can also designate that anyone (including people without userids) can schedule an appointment (useful in cases where someone want to be available for appointments with people outside of the University community).

How the System Works:

Calendar owners login to the system and create a calendar (they need only do this once). They then specify the dates and times on which they are available for appointments on their calendar by adding "blocks" of available time (one-time or recurring blocks). They can add such blocks at any time. The blocks can be "slotted" or "unslotted". Slotted blocks are divided into equal-duration appointment slots (people sign up for a specific slot). Unslotted blocks are not divided into slots (people sign up for the block). Slotted blocks are used to schedule individual appointments. Unslotted blocks correspond to the traditional "first come, first served" model of office hours, or they can also be used to schedule meetings.

When a calendar owner adds a block of available time to their calendar, they can specify various kinds of access restrictions (who can see the block and/or make

appointments). They can also set a scheduling "deadline" (by when appointments have to be made), as well as limiting how many appointments an individual may make in a block of time.

When a calendar owner adds recurring blocks of available time (e.g., every Tuesday from 2:30 until 5pm) they may designate the "kinds" of days on which they are available. The University academic calendar is built-in to WASS, so it knows which days correspond to "teaching days", "reading period", etc. This makes it easy to set up one's semester office hours. [This calendar is set up and maintained by the local WASS administrator using a supplied script].

Appointment makers login to the system and lookup a calendar owner's calendar (by userid or name or calendar title). They are shown a list of the calendar owner's calendars (it is possible for a calendar owner to create multiple calendars). Once they select a calendar, they are shown a list of times when the calendar owner is available.   They can then select an available time and make an appointment. Email notifications are sent (if requested) to the appointment maker and the calendar owner, as well as reminders (if requested).

Calendar owners and appointment makers can go into the system at any time and cancel pending appointments. Calendar owners can add and delete blocks of available time (any appointments scheduled for a deleted block are automatically cancelled, with an email notification).

WASS also allows calendar owners to designate one or more people as "managers" of their calendar. These managers might be administrative staff members who are in charge of scheduling appointments for the calendar owner. It is also possible for a calendar owner to create a "group" calendar, a calendar shared by a group of people offering a common service (e.g., tutors or examiners).

Accessing the System: The WASS system is accessed from any web browser via the a URL of the form:

<div align="center">

http://wass.yourdomain.edu

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The WASS system requires that the user have javascript and cookies enabled in their browser; if not, they receive an error message.

Once they access the system, users are given the opportunity to login (using their institutional userid and password), or to indicate that they do not have a userid (guests can use the system to schedule appointments with calendar owners who allow guests to make appointments).

Help: WASS has a built-in, context-sensitive help system, and is intended to be self-explanatory.