Use Cases for a Meeting Scheduling System

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September 2000

List of all Use Cases by Name

- Add Indication of Unavailability
- Add Indication of Availability
- Check Availability for a Meeting
- Cancel Meeting
- Cancel All Meetings
- Move Meeting to a Different Time
- Check Whether a Meeting is Movable
- Check Availability for a Meeting and Schedule if Possible
- Determine Possible Times for Meeting
- Modify the Participants in a Meeting
- Show all Meetings this Caller has Called
- Cancel Participation in a Scheduled Meeting
- Show Participant’s Schedule
- Define a Participant Set with a Label
- Modify a Participant Set Having a Given Label
- Dissolve a Participant Set Having a Given Label
- Show the Defined Sets
- Authorize a Participant to Call Meetings or Define Sets
- Initialize the System
- Provide Help in Use of the System

Template:

<table>
<thead>
<tr>
<th>Label: Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal</td>
</tr>
<tr>
<td>Actors</td>
</tr>
<tr>
<td>Initiator</td>
</tr>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Pre-conditions</td>
</tr>
<tr>
<td>Post-conditions</td>
</tr>
<tr>
<td>Qualifications, if relevant*</td>
</tr>
<tr>
<td>Extensions, if present</td>
</tr>
<tr>
<td>Scenario, if relevant</td>
</tr>
</tbody>
</table>

* I added this to avoid confusing the two kinds of “extensions”.

Glossary

- **Participant**: An actor who can participate in some meetings
- **Meeting caller**: A participant who can call a meeting
- **Participant Set**: A mathematical set consisting of participants, together with an indication of essential, desirable, or optional for each.
- **Set definer**: A participant who can define a set and gives it a symbolic name.
- **Administrator**: An actor who can initialize the system and who put other actors in the categories of meeting caller, set definer and administrator.

Add Unavailability:
Add Indication of Unavailability

- Goal: To enable a participant to give an indication of unavailability
- Actors: Participant
- Initiator: Participant
- Description: The user indicates that he/she is unavailable during a specific time interval. The system notes this fact.
- Pre-conditions: none
- Post-conditions: Meetings may be not scheduled with the user as a participant during the interval.
- Qualifications: The unavailability can be indicated as one-time or recurrent. In latter case, the first and last date, and the repeat interval, can be specified.
- Scenario
- Note: The default state for a user is available until unavailability is specified.

Add Availability:
Add Indication of Availability

- Goal: To enable a participant to add an indication of availability
- Actors: Participant
- Initiator: Participant
- Description: A participant indicates that he/she is available during a specific time interval. The system notes this fact.
- Pre-conditions: none
- Post-conditions: A meeting may be scheduled with the participant as a participant during the interval.
- Extensions
- Scenario
- Note: This effectively undoes any prior expression of unavailability at the indicated time.
### CheckAvailability: Check Availability for a Meeting

- **Goal:** To enable a user to check the feasibility of a meeting at a specific interval with a specified set of participants
- **Actors:** Meeting caller
- **Initiator:** Meeting caller
- **Description:** The meeting caller asks whether a set of users is available for a meeting during a specific time interval.
- **Pre-conditions:**
- **Post-conditions:**
- **Extensions:** If availability is positive, the meeting can be scheduled (see SetMeetingPendingAvailability)

### CancelMeeting: Cancel Meeting

- **Goal:** To enable a meeting caller to cancel a meeting previously scheduled
- **Actors:** Meeting caller, participants
- **Initiator:** Meeting caller
- **Description:** The meeting caller indicates that a previously scheduled meeting is cancelled.
- **Pre-conditions:** The identified meeting exists.
- **Post-conditions:** The identified meeting no longer exists.
- **Qualifications:** Some or all sessions of a recurrent meeting can be cancelled.
- **Extensions:** MoveMeeting, CancelAllMeetings

### CancelAllMeetings: Cancel all Meetings Called in an Interval

- **Goal:** To enable a meeting caller to cancel all meetings he/she called in a given interval
- **Actors:** Meeting caller, participants
- **Initiator:** Meeting caller
- **Description:** The meeting caller indicates that all meetings scheduled in a given interval are cancelled.
- **Pre-conditions:** The identified meetings exist.
- **Post-conditions:** The identified meetings no longer exists.

### MoveMeeting: Move Meeting to a Different Time

- **Goal:** To enable a meeting caller to move a meeting to a different time
- **Actors:** Meeting caller, participants
- **Initiator:** Meeting caller
- **Description:** The meeting caller indicates that a previously scheduled meeting is moved to a different time. The participants involved are rescheduled, if possible, and notified. The caller is notified of the outcome.
- **Pre-conditions:** The identified meeting exists.
- **Post-conditions:** The meeting is moved to a different time.
- **Qualifications:** Some or all sessions of a recurrent meeting can be indicated.

### CheckMovability : Check Whether a Meeting is Movable

- **Goal:** To enable a meeting caller to assess whether a meeting can be moved, without losing participants
- **Actors:** Meeting caller
- **Initiator:** Meeting caller
- **Description:** The meeting caller asks whether a previously scheduled meeting is movable to a specified time.
- **Pre-conditions:**
- **Post-conditions:**
- **Qualifications:** Some or all sessions of a recurrent meeting can be indicated.
- **Extensions

### SetMeetingPendingAvailability : Check Availability for a Meeting and Schedule if Positive

- **Goal:** To enable a user to check the feasibility of a meeting at a specific interval with a specified set of participants
- **Actors:** Meeting caller, participants
- **Initiator:** Meeting caller
- **Description:** The user requests a listing of times at which a meeting with a specified set of participants or labeled participant set could be scheduled.
- **Pre-conditions:** If the meeting is schedulable, no meeting with the generated serial number exists.
- **Post-conditions:** The meeting is set at the time indicated, if possible, and the invitees are scheduled accordingly. The invitees are then notified. The meeting caller is notified of the outcome either way. If the meeting is schedulable, a meeting with the generated serial number exists.
- **Qualifications:** The meeting can be declared as one-time or recurrent. In latter case, the first and last date, and the repeat interval, can be specified. The recurrent meetings are given serial nos S.1, S.2, ... where S is the overall serial number for this meeting.
<table>
<thead>
<tr>
<th>Scenario Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FindMeetingAvailability</strong>:</td>
<td>Determine Possible Times for Meeting</td>
</tr>
</tbody>
</table>
| | - Goal: Enable a user to find a time for a meeting with a specified set of participants.  
| | - Actors: Meeting caller  
| | - Initiator: Meeting caller  
| | - Description: The user requests a listing of times at which a meeting with a specified set of participants or labeled participant set could be scheduled.  
| | - Pre-conditions:  
| | - Post-conditions:  
| | - Qualifications: The meeting can be declared as one-time or recurrent. In latter case, the first and last date, and the repeat interval, can be specified.  
| | - Extensions  
| | - Scenario |
| **ModifyParticipants**: | Modify the Participants in Meeting |
| | - Goal: Enable a meeting caller to alter the set of participants in a meeting.  
| | - Actors: Meeting caller, participants  
| | - Initiator: Meeting caller  
| | - Description: The meeting caller indicates a modification to the participants in a meeting. The affected participants are notified. The caller is notified of the result, including any participants who are unavailable. (If participant sets were used, these are not modified.)  
| | - Pre-conditions: The specified meeting exists.  
| | - Post-conditions: The meeting participants are modified as indicated.  
| | - Extensions  
| | - Scenario |
| **ShowMeetingsCalled**: | Show all Meetings this Caller has Called |
| | - Goal: Enable a meeting caller to show all meetings that have been called.  
| | - Actors: Meeting caller  
| | - Initiator: Meeting caller  
| | - Description: The meeting caller requests to see all meetings in effect during a given interval.  
| | - Pre-conditions:  
| | - Post-conditions:  
| | - Qualifications: The caller can optionally request listing of participants.  
| | - Extensions  
| | - Scenario |
| **CancelParticipation**: | Cancel Participation in a Scheduled Meeting |
| | - Goal: To enable a participant to indicate non-participation in a specific meeting, even if availability was indicated.  
| | - Actors: Participant, meeting caller  
| | - Initiator: Participant  
| | - Description: The participant indicates that he/she will not attend a previously scheduled meeting. The caller of the meeting is notified in the case that the participant was essential.  
| | - Pre-conditions: The participant is scheduled for the meeting.  
| | - Post-conditions: The participant is not scheduled for the meeting.  
| | - Extensions: If availability is positive, the meeting can be scheduled (see SetMeetingPendingAvailability)  
| | - Scenario |
| **ShowSchedule**: | Show Participant’s Schedule |
| | - Goal: To enable a participant to determine the meetings at which he/she has been scheduled.  
| | - Actors: Participant  
| | - Initiator: Participant  
| | - Description: The participant requests a list of meetings at which he/she has been scheduled in a given time interval.  
| | - Pre-conditions:  
| | - Post-conditions:  
| | - Qualifications: The participant can optionally request listing of participants.  
| | - Extensions  
| | - Scenario |
| **Define Set**: | Define a Participant Set Using a Label |
| | - Goal: To enable a meeting caller to refer to a set of participants by a single name, which can be used in other use cases.  
| | - Actors: Set definer, participants  
| | - Initiator: Set definer  
| | - Description: The set definer defines a set of participants, each with a specification of essential, desirable, or optional, giving the set a symbolic label. The participants are notified of the creation of the set.  
| | - Pre-conditions:  
| | - Post-conditions: A set with the indicated label exists.  
| | - Exception: A set with the indicated label already exists.  
| | - Extensions  
| | - Scenario |
### Modify Set: Modify a Participant Set Having a Given Label

- **Goal:** To enable a set definer to modify the contents of a given set.
- **Actors:** Set definer
- **Initiator:** Set definer
- **Description:** The set definer specifies modification of a given Participant Set.
- **Pre-conditions:** A set with the label exists.
- **Exceptions:** No set with the label exists. The proposed modification doesn’t agree with the set constituency.
- **Extensions**
- **Scenario**

### DissolveSet: Dissolve a Participant Set Having a Given Label

- **Goal:** To enable a set definer to dissolve a set no longer used.
- **Actors:** Set definer
- **Initiator:** Set definer
- **Description:** The set definer dissolves an existing list. Participants are notified.
- **Pre-conditions:** A set with the label exists.
- **Post-conditions:** No set with the label exists.
- **Exception:** No set with the label exists.
- **Extensions**
- **Scenario**

### ShowSets: Show the Defined Sets

- **Goal:** To enable a set definer to see the defined sets.
- **Actors:** Set definer
- **Initiator:** Set definer
- **Description:** The set definer requests a list of defined sets, which is then provided.
- **Pre-conditions:**
- **Post-conditions:**
- **Extensions**
- **Scenario**

### Authorize/Unauthorize: Authorize a Participant to Call Meetings or Define Sets

- **Goal:** To enable participants to have special roles.
- **Actors:** Administrator
- **Initiator:** Administrator
- **Description:** An administrator adds or removes privileges such as those of meeting caller and set definer for participants.
- **Pre-conditions:** The identified participants possess or lack certain privileges.
- **Post-conditions:** The identified participants possess or lack certain privileges.
- **Extensions**
- **Scenario**

### Initialize: Initialize the System

- **Goal:** To enable the system to be reinitialized.
- **Actors:** Administrator
- **Initiator:** Administrator
- **Description:** An administrator (re-)initializes the system, removing all meetings, defined sets, and privileges.
- **Pre-conditions:**
- **Post-conditions:** There are no privileged actors other than the administrator, no meetings, and no defined sets.
- **Extensions**
- **Scenario**

### Help: Provide Help in Use of the System

- **Goal:** To enable actors to determine how to use the system without consulting a manual.
- **Actors:** Any actor
- **Initiator:** Any actor
- **Description:** The actor requests help. The system replies with a help message.
- **Pre-conditions:**
- **Post-conditions:**
- **Exception:**
- **Extensions:** Help on specific topics
- **Scenario**