A Software Survey of Meeting Scheduling Applications Group 11

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ABSTRACT

A key use of human communication using computers is to plan in person meetings. Often this requires the coordination of many users so many tools have been developed to enable this. This report looks at several existing solutions.

Author Keywords

Consumer Applications; Calendaring; Novel Interfaces, Natural Language Processing

DOODLE POLL

Doodle is an event scheduling website that focuses on giving invitees the option to vote on event dates and times. With each invitee able to vote up time slots suitable to their availability, the event organizer can find the least conflicting time slot.

High Level Goals

A scheduling system such as Doodle strives primarily to achieve one thing: Have a group of participants reach an agreement on a time and place to meet.

Tasks

There are two major tasks users of the system will want to accomplish.

- Creating a new event

- Responding to an event invitation

Figure 1 shows the diagram for the major tasks users of "Doodle" perform.

This critique will focus on these tasks.

Creating a new event

From a new user's perspective, Doodle does a good job at keeping its design language (button style, icon choice etc.) in accordance with popular modern practice. The homepage lists only a few options with the most likely next step (Create a Doodle/Create Doodle poll) made clearly the most prevalent among them.

A text entry field inhabited by the "What's the occasion" placeholder gives is given immediate focus upon loading the page. There may be some unhelpful redundancy between the two separate "Create Doodle poll" buttons made available. Both fulfill nearly the exact same functionality (the difference being that the button next to the form will populate the "Enter title" field on the event creation page with the contents of the "What's the occasion" text field.

The first step on the event creation page is to outline some information about the occasion. Something lacking here is a clear way for a user to cancel the creation of the new event. Simply leaving the page or pressing the back button in the browser accomplishes this, but this may not be obvious to every user.

The second step presents a dialog for selecting dates for the event. Although the creator can select as many days as they like in this dialog (these will be the options participants choose from), events are effectively limited to single days. Beyond selecting multiple adjacent (but still independent), there is no first class method for creating an event spanning two or more days.

After an event has been created, it is given a unique URL that can be shared with event invitees. The creator can register to be notified of activity within their event and is given control over finalizing the date once she/he deems that a sufficient number of people have voted.

Voting on/Responding to an event invitation

Going to an event URL, an invitee is presented with the homepage for the event. The event homepage does very little in terms of guiding the user towards what they are meant to do. There is a somewhat inconspicuous text field with the greyed out placeholder "Enter your name" as well as boxes for the user to vote on the proposed dates. Doing something as little

as giving the name field focus (as was done with the Doodle's index) would at least guide a new user in the right direction.

NEED TO MEET?

Critique
"Need to Meet?" is a meeting scheduling website that helps users enter to select mutually agreeable meeting times. Other than a noticeable lack of certain features (notifications of when the meeting was decided) certain ways of interacting with the website lack discoverability, particularly the button to open the calendar view when an attendee is selecting their available dates and times.

High Level Goals
There are two high level goals for the website:

- Creating a meeting event and showing available time slots

- Indicating when you can attend the meeting

Tasks
Figure **??** shows the diagram for the major tasks users of "Need to Meet" perform. These include:

1. Creating a Meetup Event to get availabilities of attendees

2. Click schedule a meeting

3. Enter meeting title and duration, optionally add email for correspondance

4. Using a calendar interface select the dates and times (optionally send people invites through the website)

Figure 7 shows the diagram for the major tasks meeting attendees do. These include:

1. Navigate to the event via the link sent by the host

2. Indicate availability, enter name, and submit

GOOGLE SUITE
The Google Apps suite offer a great deal of functionality to individuals and organizations. The tight integration of the suite offers many opportunities for improved usability. Two such apps are Calendar and Inbox, in the tight integration for shared meeting events.

Calendar presents the user's schedule immediately and keeps it as the main focus of the app. Interactions are very straightforward, and most day to day calendaring can be done without entering a menu.

Inbox is a very powerful email client focused on using email to get things done. It has many inbox management features like snoozing emails from the inbox for some time and bundling similar low priority emails together. It also offers quick calls to action from the inbox like event invites and flight information.

Inviting Someone to a New Event with Calendar
Users begin the invitation process by selecting or creating the event for which invitations should be sent. This model is better than having meeting invites be a separate entity. After creating

or selecting an event, the user must enter its detail page to make invitations. The invitees emails are entered one by one in a text field and invites are sent. Not showing invitees from the app's main screen is a reasonable design decision as invites are not a primary feature of Calendar

Responding to a Calendar Invite from Inbox
Calendar invites are received as regular emails which are augmented by Inbox. When the email is opened, event details are presented and three buttons indicating "Yes", "Maybe", and "No". This system is exceptionally straightforward offers little room for improvement. One option is to present the event in the context of their calendar so conflicts can be identified.

OUTLOOK
Microsoft Outlook is an application which acts as a desktop email manager on the front. Outlook takes an existing email address and once added into the Microsoft Outlook registry, it allows the user to manage their emails, calenders and other various smaller actions (such as todo lists and journals). In addition to this, a user can use Microsoft's servers (Microsoft Exchange Server) to allow multiple users to access shared applications (email and calender) or contact each other via Skype meeting.

To a new user, Outlook is similar to any Microsoft Office product where many of the options will be at the taskbar at the top, all categorized in their own particular category. This can be challenging for any users who are not familar with the Office application family, as there are many different categories that require searching. In addition to this, users may have a hard time knowing what each option does initially, which may cause users to be overwhelmed with the vast amount of options.

Fortunately this is alleviated with a search function where Outlook will return results similar to what the user is looking for (e.g. searching for calender will return options regarding calender) as well each option has a brief description of what it does when it is hovered over.

Some of the few high level goals that Outlook can help a user achieve:

- Date/meeting management

- Email management

Date/Meeting Management
Figure 9 shows the diagram for the Create Meeting major task of Outlook.

For date/meeting management, Outlook allows one to set up a calender between users through the Microsoft Exchange Server. The steps can be seen through the diagram above.

1. Users may create a subject

2. Users may set a location

3. Users may set a start time

4. Users may set an end time

5. Users may set the meeting as an all day event

6. Users may enter body text

7. Users will add recipients for the meeting to be sent to

8. Meeting organizer will enter all potential attending members' email address

9. Meeting will be sent to all recipients

The date/meeting management is handled similarly to sending an email, wherein a user can use many of the features that an email already offers (e.g. creating subjects, body text, adding email recipients), as well it adds in features that help with setting up meeting details (e.g. locations and meeting times). After the meeting details are sent, receipients will be able to respond to the notification as an email, check the calender or check meeting minutes (if meeting has occurred).

1. Open Meeting Email

2. Respond to email (send reply)

3. Check meeting minutes

4. Check Calendar for meeting date

Email Management

Figure 12 shows the diagram for the Sending Email major task of Outlook.

For email management, Outlook handles users to manage both their personal email as well as a shared mailbox. The steps can be seen through the diagram above.

1. Users may create a subject

2. Users may set email as a Carbon Copy (CC) to send to multiple people

3. Users may enter a body text

4. Users may check names

5. Users can select the suggested names

6. Users may attach a file/item

7. Users may add a signature

8. Users may add priority/flags to the email

9. Users will add recipients to send to

10. Users will send the email

Outlook uses a layout that is similar to many email interfaces. It uses this interface for both personal and shared mailboxes. This allows users to navigate inside the shared mailbox or find email addresses with relative ease. After the email is sent (via person email or within the shared mailbox), recipients will be able to respond to the email via reply.

1. Open email

2. Reply

3. Reply All

4. Forward

5. Forward email to new recipient

6. Archive email

7. Move email to new folder

8. Add tags to email

9. Edit the email

For clarity, the diagram does not include a path for Reply, Reply All and Forward because it is essentially the same as the Sending Email diagram.
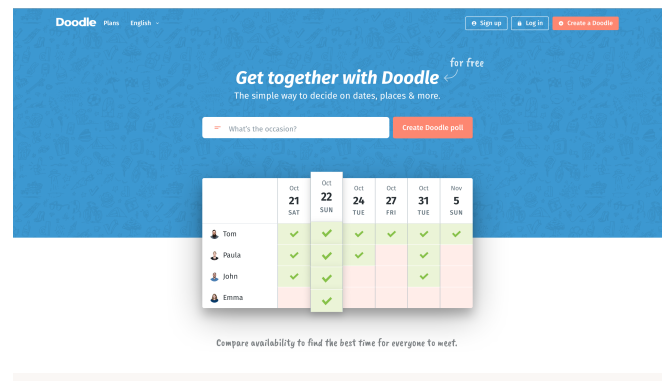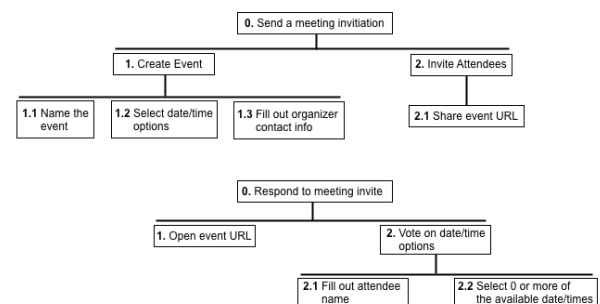
APPENDIX

Figure 1. Doodle homepage

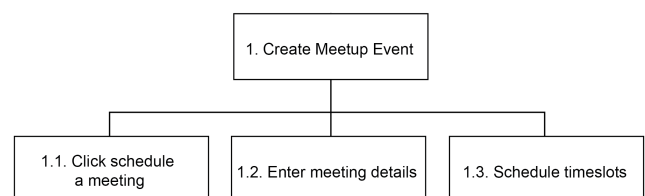**Figure 2. Task Diagram**

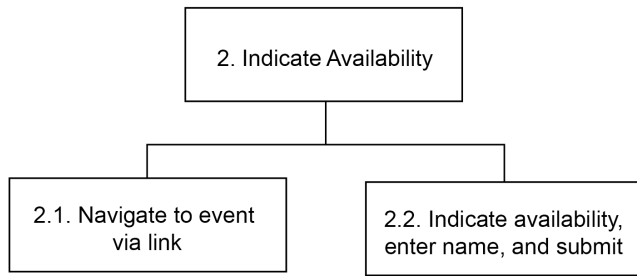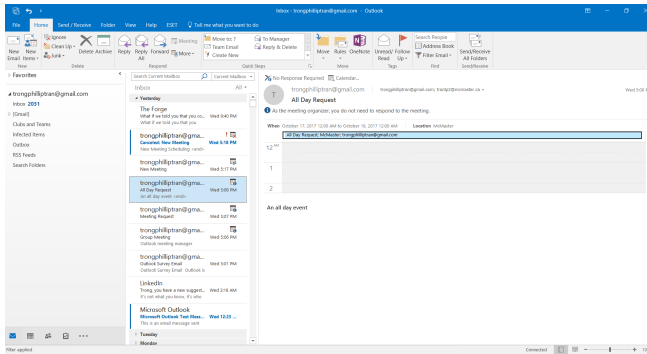**Figure 6. Task Diagram**

Figure 7. Task Diagram

Figure 8. Outlook has many options, which can be overwhelming if a user has no experience in using Microsoft Office type applications
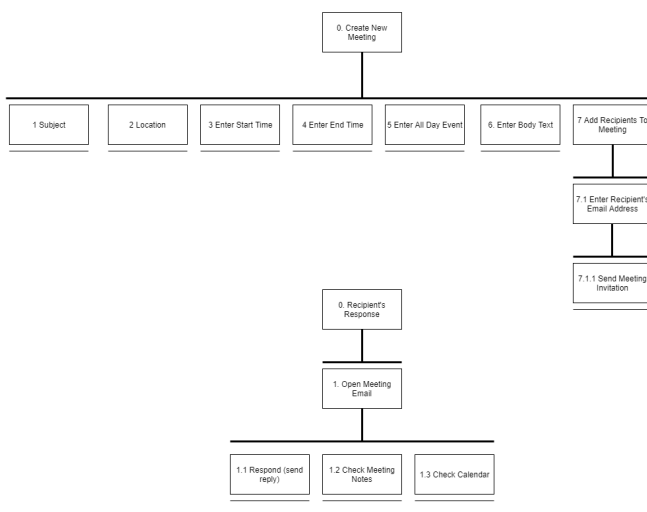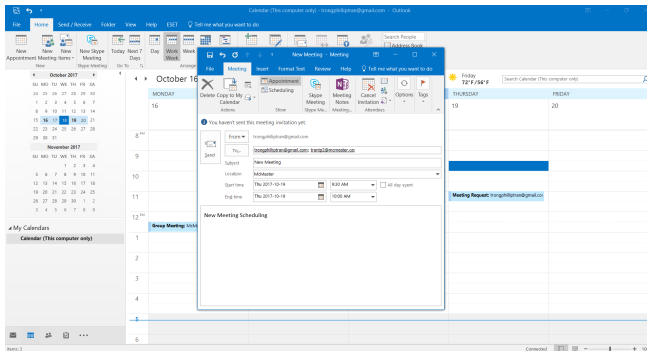

Figure 9. Task Diagram
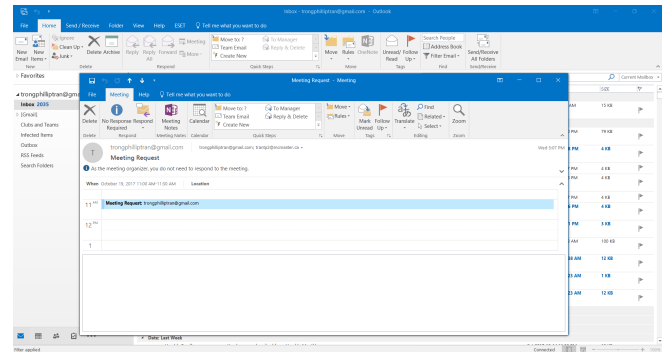

Figure 10. New Meeting Scheduling

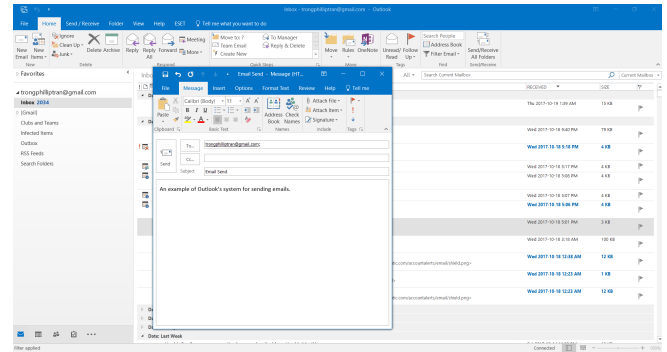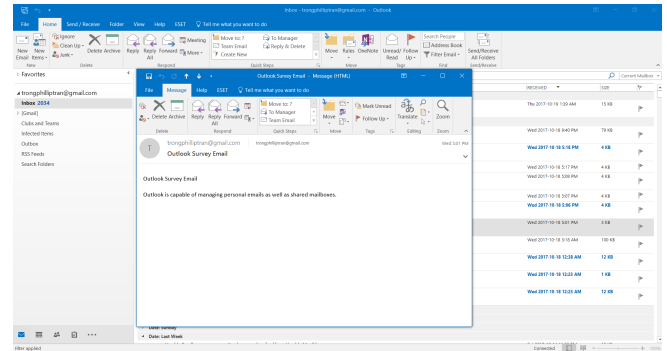Figure 11. Meeting Request Response

Figure 12. Task Diagram

Figure 13. Meeting Request Response

Figure 14. Meeting Request Response