

Appendix A: Design Ideas & Support

Contents

Design Idea Listing	28
<i>Includes Design Ideas, Support, and Prioritization Scale</i>	
Design Idea Distribution By Method	33
<i>Includes Design Ideas, Support, and Prioritization Scale</i>	

Design Idea Listing

Priority Color Key: High Medium Low

(derived from UAR severity ratings, effect on user's work observed in CI, and number of methods observed in)

Design Idea Number	Design Idea	Inspirations	Inspiration Titles/Explanations
DI-01	In Date Book day view, single arrow navigates day by day, double arrow navigates week by week.	TA-16	The user goes past Oct. 29 when navigating the calendar by week.
		CW-01	Unclear Function of Navigation Arrows on Calendar
DI-02	New capability for planner for students and professors – specific week view of 'semester schedule' – specifically addresses weekly planning without having to use 'repeating' appointment functionality.	CD-Artifact Model; CD-Workflow Model	Inefficient paper calendar is used to plan out semester schedule; requires data to be entered twice (observed in both Artifact and Workflow Models).
DI-03	Ability to hide and view appointments from different categories (home, work, etc.).	CD-Artifact Model	The user clusters her appointments by category in her paper calendar.
DI-04	Networked calendar where you can check your schedule against someone else's; also would be nice to have Bluetooth and Palm by Palm calendar synching.	CD-Cultural Model	User influenced by others requesting meetings with her.
		CD-Sequence Model	Breakdown occurs when user tries to find an acceptable meeting time with student.
DI-05	Other people can 'suggest' appointments for other people in network – Palm notifies you of suggested appointments, tells you of conflicts, asks if you want to accept – or, you get an email, can click accept right from email, or reject, both of which sends email to creator.	CD-Cultural Model	User influenced by HCI Coordinator informing her of meeting obligations.

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Design Idea Number	Design Idea	Inspirations	Inspiration Titles/Explanations
DI-06	Scheduling is not an isolated activity – your network of contacts deeply influences your schedule and need to be accounted for.	CD-Cultural Model	User influenced by others requesting meetings with her. User influenced by HCI Coordinator informing her of meeting obligations.
DI-07	Auto family reminders – ex: birthday reminder two weeks ahead. Abstract idea: system asks if you want to be reminded of contact birthday that it knows – can be grouped, i.e. tell me friend contact birthdays.	CD-Cultural Model	User influenced by friend and family requiring that she stay in touch with them.
DI-08	Better differentiation between applications.	TA-04	Preferences is a "Stupid" Label (user is trying to set an appointment alarm under the system preferences application)
DI-09	Change Preferences to Palm Preferences or Palm Settings. Preferences page should have obvious help button next to difficult concepts.	TA-04	Preferences is a "Stupid" Label
DI-10	Battery status bar when tapped displays time left in battery and or percentage / or could always be there.	HE-11 HE-29 HE-45	Battery Indicator Absent on most screens. Battery Indicator Not Specific: Doesn't indicate how much battery time is left. Battery Status Bar Ambiguous: Can't immediately tell that it is meant to be a battery.
DI-11	Make sure we still support synching and working with existing programs – not a huge design idea, but just observed from CI to note. If adding new features to Palm, make sure it's supported by iCal, etc.	CD-Workflow Model	User makes use of and needs to coordinate multiple applications and devices (iCal on Desktop, calendar app on cell phone, etc.).

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Design Idea Number	Design Idea	Inspirations	Inspiration Titles/Explanations
DI-12	Possibly have Palm calendar mimic user's primary calendar.	CW-Side Issue	For Step 10, Question 3, the label "Alarm" is not as clear as the label "Reminder" would be. Alarm seems more suited for waking up rather than reminding someone of an event. However, we note that iCal also uses this label; based on our a priori assumption that the user is familiar with computer-based calendar systems, it is possible that she has seen this label before.
DI-13	Security : include hint function to prevent loss of password (ex: what's your mother's maiden name).	HE-39	Lost Password Deletes All Files: No way to recover from forgotten password.
DI-14	Security: have an 'always use security' checkbox to prevent having to do this every time.	HE-12	Missing Shortcuts: No quick way to turn off Palm Pilot with Password protection
DI-15	Security: star password as being entered and have confirm box.	HE-34	Password is Visible When Typing: It is presented in clear text.
DI-16	The Palm should support more efficient role switching.	CD-Workflow Model; CD-Cultural Model; CD-Sequence Model	User spent too much time in her role as 'scheduler', which took away time from her primary role as 'professor'.
DI-17	Welcome setup: provide exit.	HE-05	No Quick Exit from Welcome/Setup application. Must complete the process before exiting.
DI-18	Find: ability to refine (ex: only show results from Date Book) and sort search results.	TA-05	Unwelcome Welcome Application
		HE-41	Find Function Doesn't Allow Search Refining: Can't specify a particular application to search within.
		HE-50	Search Results Vague: Don't state how many items were found.

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Design Idea Number	Design Idea	Inspirations	Inspiration Titles/Explanations
DI-19	Creating Appoint / Reminders: a. Idea 1: have all appointment input – including reminders - available from one screen (maybe tabs). b. Idea 2: wizard that orders steps by importance (time and name first) and can be exited at any time.	TA-02 TA-03 TA-09 TA-17	Blank appointments get deleted User does not set end time Button labeled details does not indicate the ability to set the alarm User attempts to set appointment reminder in set appointment time screen
DI-20	Creating Appointment: specifically indicate that you are 'on' start time.	CW-02	No indication of Start Time field being in focus
DI-21	Reminder: change label for reminder to 'minutes before' and maybe also 'minutes after'.	CW-03	Unclear Label for Alarm Time in Event Details.
DI-22	Put up and down arrows on default day view in order to see earlier times.	TA-11 TA-15	User Doesn't See Desired Time User Cannot Figure out how to set a 7am Appointment Start Time
DI-23	'View By' menu in Date Book: change to explicitly labeled drop down menu rather than ambiguous icons.	HE-49	Buttons for Different Date Book Views Unclear: The buttons for Day View, Week View, etc. are dots and don't represent their meaning well.
DI-24	Address book and email components: not enough data and too complex to deal with now.	CI/CD	Although our CI and CD indicate that these applications are important, we do not have 1) enough data to base changes on, or 2) enough time to do address these applications now. We did, however, want to make sure to acknowledge their importance.

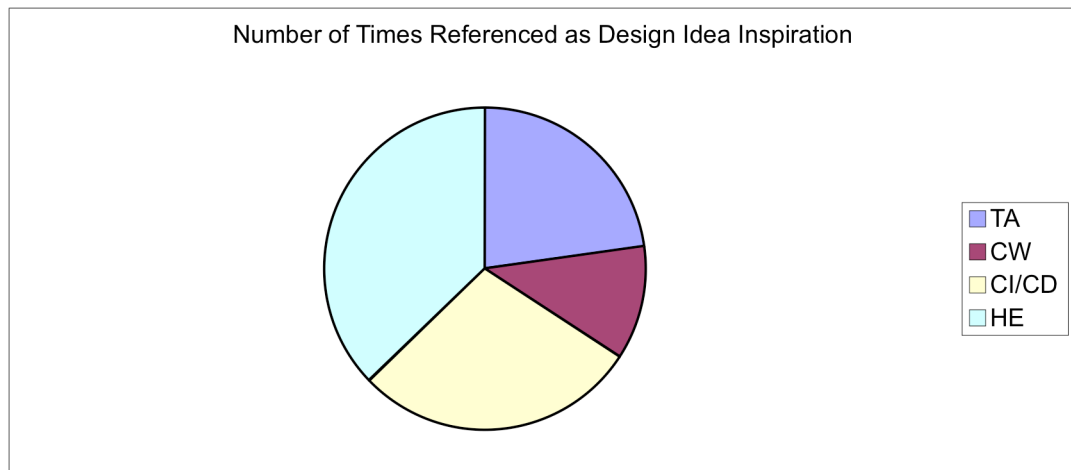
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Design Idea Number	Design Idea	Inspirations	Inspiration Titles/Explanations
DI-25	Incorporate task bar functionality or at least some of it...ability to easily switch between apps.	TA-19	Unclear About How to Go From Applications Menu Back to Date Book
		HE-15	Missing Navigation: Unable to go back to previous applications.
DI-26	More obvious affordance to access Menu.	HE-04	Menu Nonexistent in Preferences screen, no indication that it is absent despite similar appearance on screen.
		HE-07	No Indication of Menu Availability: On the top of apps, it is possible to click the app name and produce the menu, but there is no indication of this.

Design Idea Distribution By Method

The graph below shows which methods contributed the most to the design ideas listed above:



As can be observed from this graph, the Heuristic Evaluation and the Contextual Inquiry and Design tended to influence the design most. As indicated in our retrospective, the design ideas coming from Contextual Inquiry and Design tended to be of a larger nature. These ideas involved entirely new modules being added to the Palm. On the other hand, UARs from the other methods tended to focus on minute details, such as labels, visibility and affordances. These types of problems are more local in nature.