GUIDELINES IN HCI

PRINCIPLES OF GOOD DESIGN

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- Naturalness
- Consistency
- Non redundancy
- Supportiveness
- Flexibility

NATURALNESS

- Does not cause the user to alter significantly in interacting with the system.
- Use of language should be natural.
- Jargons may be desirable- provided its used everyday
- Use of non standard abbreviations shall be avoided, which may slow down the word recognition

CONSISTENCY

- Consistent layout of screen should be maintained, which shall allows the users to fulfill the similar functionalities.
- The dialogues should be consistent with established norms.
- Eg: In Pcs & ATM Return or Enter Command means confirming – Changing that may lead to confusing

NON REDUNDANCY

- Requires the user to input only minimum information for the system.
- Eg: 10 instead of 00010 – Avoid zeros before
- User shall not ask to give the information, which shall be automatically fetched from the system
- Too much of information on one screen is detrimental to the clarity of the screen and will delay the user.

SUPPORTIVENESS

- It refers to the amount of assistance the dialogue provide to the users in running the system.
- Instructions shall be provided by system prompts and by additional help facilities.
- Error message should be helpful and not obscure.

FLEXIBILITY

- It refers to how well it can provide or tolerate different levels of user familiarity and performance.
- It depends on the skill of the expertise of users in relationship to given task.
- Eg: Hierarchical menu structures shall be used for first time user-may be navigated using commands

Fast Ferries Reservation Form

OUTWARD VOYAGE		INWARD VOYAGE	RESERVED ACCOMMODATION				
First choice	From	From	Type of cabin preferred	OUTWARD Night/Day		INWARD Night/Day	
	To	To					
Date			If whole cabin is not required, No. of berths/couchettes* *delete as applicable	Male	Female	Male	Female
Sailing time							
Second Choice	From	From					
	To	To					
Date			No. of reclining seats				
Sailing time			No. of Club Class seats				

NAME AND ADDRESS (Block capitals please) Name	VEHICLE DETAILS Reg. No.
Address (or Agent's stamp)	Overall length (inc. roof-top luggage) m Height under 1.83m*/over 1.83m* (inc. roof-top luggage) *delete as applicable
	CARAVAN*/TRAILER* DETAILS *delete as applicable
	Overall length (inc. tow-bar) m Height under 1.83m*/over 1.83m* *delete as applicable
Post Code	Motorcycle Reg. No. Solo/combination* *delete as applicable
Telephone No.	PASSENGERS No. of adults (inc. driver) No. of children (over 4 and under 14)
CHALET/CARAVAN/CAMPING SITE please tick appropriate box ❑ Tent rental ❑ Chalet ❑ Caravan/camping site	INSURANCE Holiday insurance ❑ Vehicle cover extension ❑ Caravan/trailer cover extension ❑
	Car make Car model
	Date of return if not stated above Age of vehicle if personalized number plate
	Please tick box if cover required for winter sports activities ❑

Screen design Copying Form Layout

FAST FERRIES

OUTWARD VOYAGE INWARD VOYAGE RESERVED ACCOMMODATION
1ST CHOICE FROM STN TO SAM FROM DIP TO WEY CABIN OUT DAY IN NIGHT
1105 891031 2230 891222 BTHS/CHTS 1M 2F

2ND CHOICE FROM STN TO SAM FROM SAM TO STN RECLIN 0 0
CONFIRMED 1105 891031 2330 891222 CLUB CLASS SEATS 0 0
NAME AND ADDRESS VEHICLE DETAILS
NAME MRS. E. CURRY REGNO E999GGY
ADDRESS 14 CHESTER AVE OVERALL LENGTH 3.4M HEIGHT Y
CHELTENHAM CARAVAN/TRAILER CARAVAN
GLOS. OVERALL LENGTH 3.3M HEIGHT N
POSTCODE CH1 1AX MOTORCYCLE REGNO:
TELEPHONE NO: 025437571 PASSENGERS: NO. ADULTS 3 NO. CHILDREN 0

CHALET/CARAVAN/CAMPING SITE INSURANCE
TENT RENTAL N HOLIDAY VEHICLE COVER C/T EXTENSION
CHALET N Y Y Y
CARAVAN/CAMPING SITE Y CAR MAKE FORD MODEL SIERRA COSWORTH
DATE OF RETURN AGE
WINTER SPORTS

CONFIRM?

PRINCIPLES OF GOOD DESIGN

- Non redundancy
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- Supportiveness
- Flexibility

GOLDEN RULES OF INTERFACE DESIGN

8 Golden Rules of Interface Design

- Ben Shneiderman American computer scientist and professor at the University of Maryland Human-Computer Interaction Lab

8 GOLDEN RULES OF INTERFACE DESIGN

Strive for consistency

▪ In actions, sequences, layouts, commands, etc. users become familiar with the digital landscape of your product so they can achieve their goals more easily.

Enable frequent users to use shortcuts

▪ Special keys sequences , macros to perform regular or familiar functions.

▪ Frequent / advanced user can navigate and operate the user interface more quickly and effortlessly.

8 GOLDEN RULES OF INTERFACE DESIGN

Offer Informative Feedback

•For every user action apt to the action's magnitude. The user should know where they are at and what is going on at all times

Design Dialogs to Yield Closure

• User Knows when the task is completed. Don't keep your users guessing. Tell them what their action has led them to.

• Closure the Famous ATM Insert.

8 GOLDEN RULES OF INTERFACE DESIGN

Permit Easy Reversal of Actions

- Relieves anxiety and promotes exploration
- Should we introduce CONTROL Z!!!

Offer Error Prevention or Error Handling

- Users prevented from making errors or mistakes
- Clear feedback in case of errors to recover
- When unavoidable errors occur, ensure users are provided with simple, intuitive step-by-step instructions to solve the problem
- Flag the text fields where instructions to solve the problem
- Flag the text fields where the users forgot to provide input in an online form

8 GOLDEN RULES OF INTERFACE DESIGN

Support Internal Locus of Control

- User has full control of the system

Reduce Short Term Memory Load

- Keep displays simple
- Consolidate multiple page displays - give time for learning actions

Consistency

Contain consistent graphic elements regardless of whether it's a version from the 1980's or the 2010's.

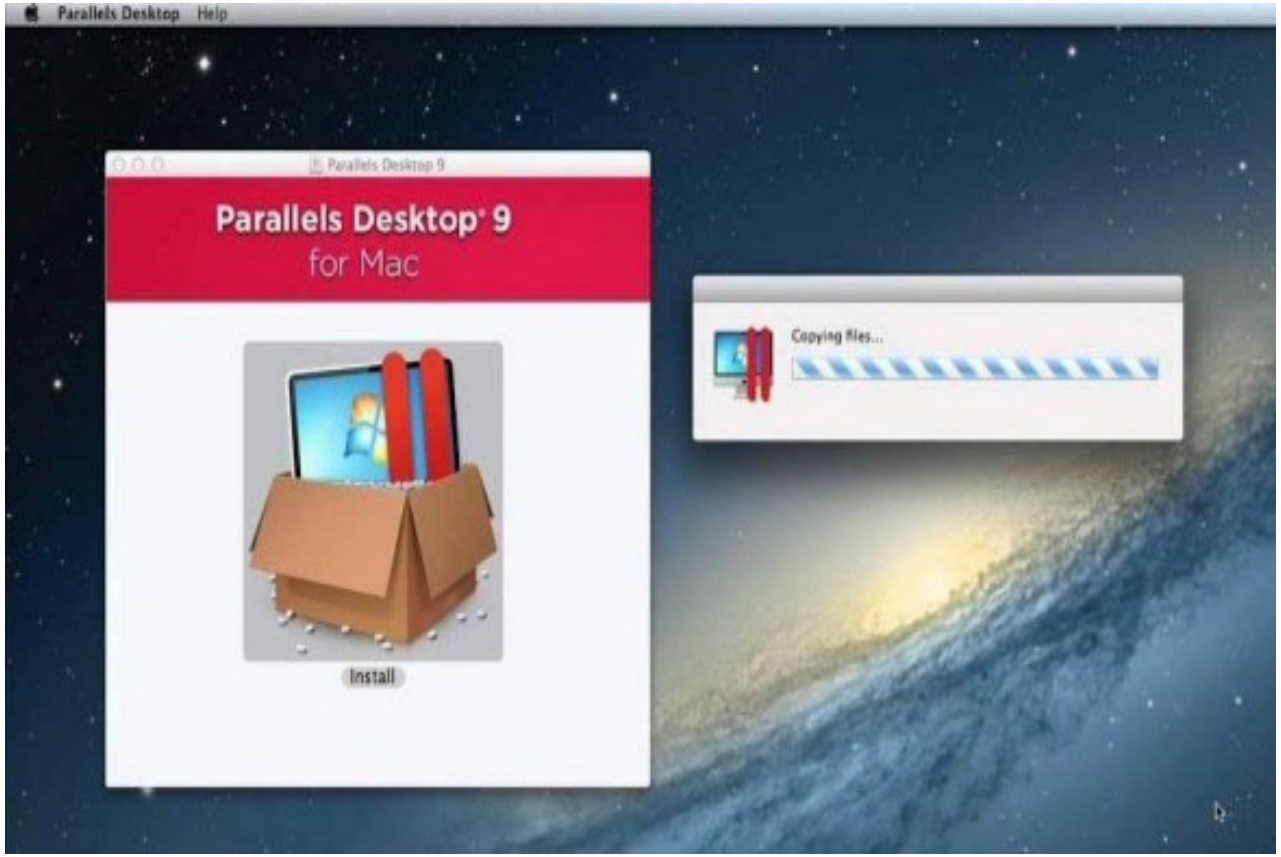
SHORTCUTS

Commonly used examples include copy and paste (Command-C and Command-V)

INFORMATIVE FEEDBACK

The ‘Learning’ folder becomes highlighted as the user clicks on a folder on a Mac desktop.

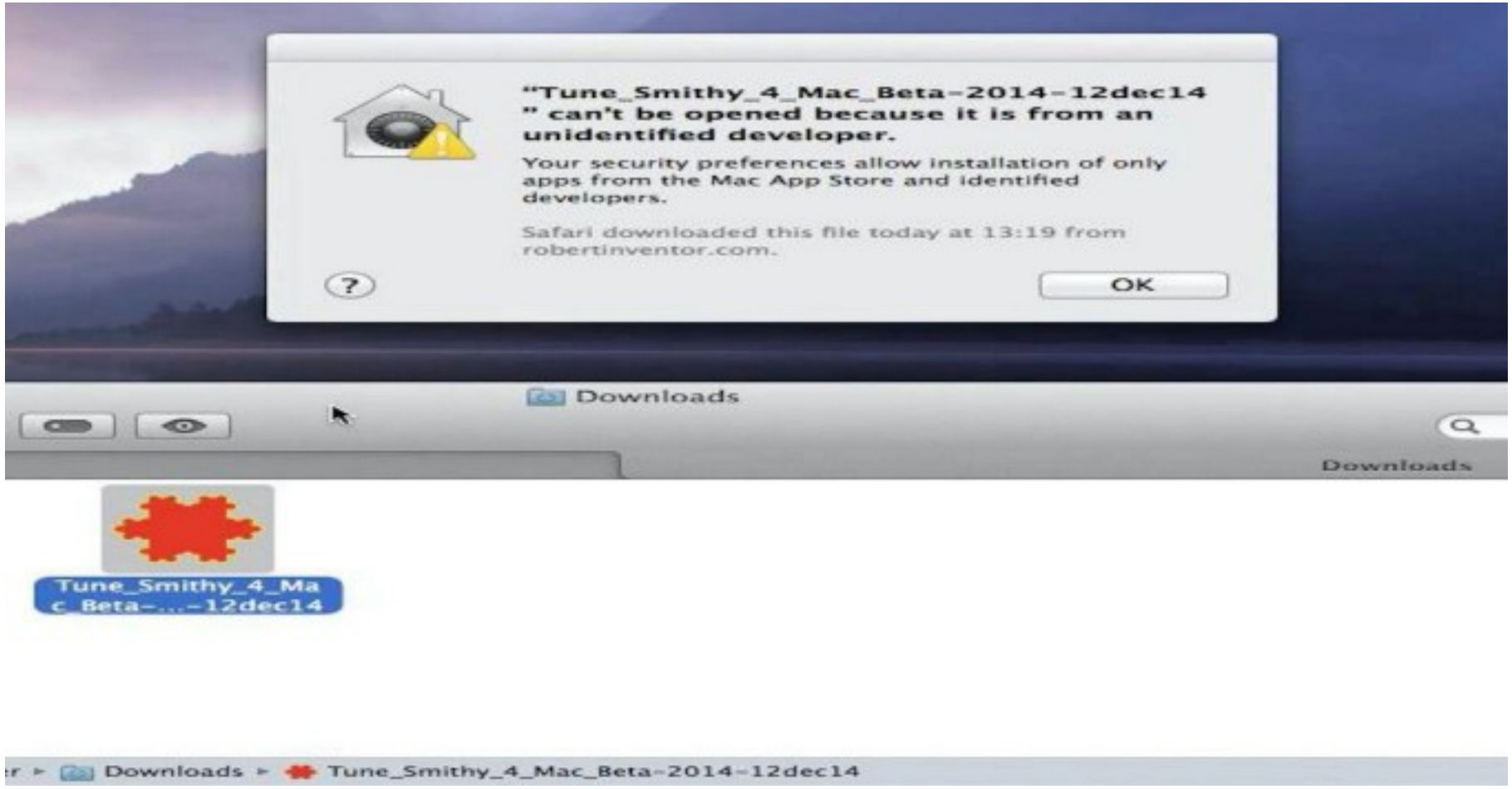
DIALOGUE



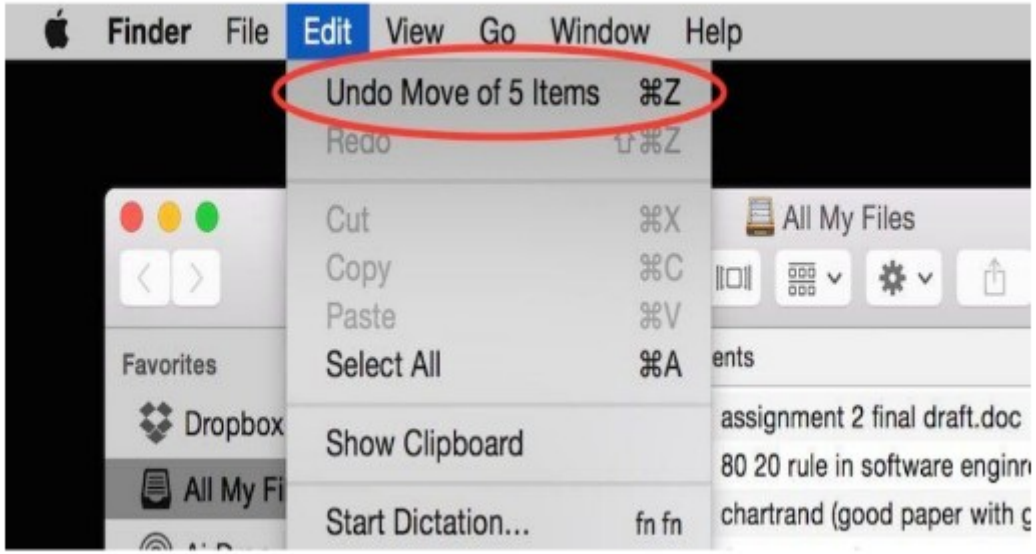
WRAP UP

As the user installs the program “Parallels Desktop 9”, it shows that it is currently “copying files”.

ERROR HANDLING

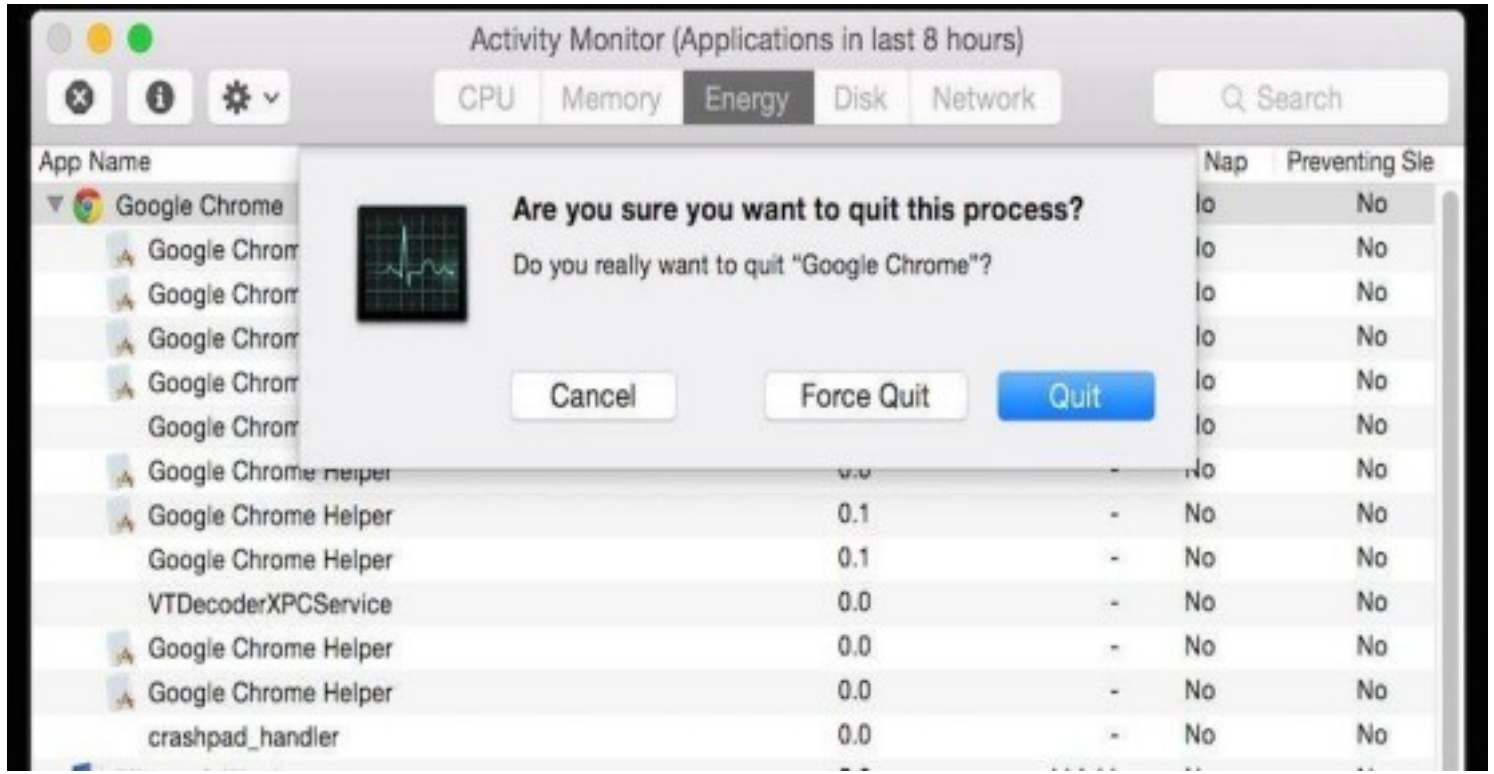


PERMIT REVERSAL OF ACTIONS



The user can undo a previous action quickly and easily.

SUPPORT INTERNAL LOCUS OF CONTROL



The user is able to
Quit
or Force Quit a
program
if it crashes.

Reduce short-term memory load

Apple implements the rules of consistency by displaying the same bottom menu across different versions of the iOS.

Shneiderman's 8 Golden Rules of Interface Design

The principles	Questions to consider
1. Strive for consistency	Is the style of this element maintained across your site/app? Is this content placed in the correct location according to the site hierarchy? Does this follow the conventions for your chosen platform? How can you make your designs more consistent?
2. Enable frequent users to use shortcuts	Are there shortcuts available for your more experienced users? Who is this product designed for? Will there be a need to consider experienced users? How can you make it easier and quicker for experienced users?
3. Offer informative feedback	Does the user know where they are at in the process? Does the user know what they have done after performing this action? How are you communicating this feedback to your user?
4. Design dialogue to yield closure	Does the user have to do any guessing here? Is it clear and obvious enough for your intended audience? Are there any next steps for the user? How are you communicating the system status with the user?
5. Offer simple error handling	Have you done everything imaginable to prevent this error from happening on your end? Is this error avoidable in the first place? If the user does make an error, how easy is it for them to fix it?
6. Permit easy reversal of actions	How many steps does the user have to take to reverse their actions? Will the user quickly realize they need to reverse the action in the first place? How can you make your users detect the possibility of reversal?
7. Support internal locus of control	Will the user feel in control at this specific touch point in your app? Will they be surprised in an unpleasant manner? Does the site feel easily navigable? Does the user feel safe and in control? How can you make the user feel more safe and in control?
8. Reduce short-term memory load	Are there enough visual cues here for the user to find the functionality or item? Do they have to remember things to understand what's going on? How can you help the user recall?