

# CS2101 Effective Communication for Computing Professionals



## 7.1 Writing User Guides

# Learning outcomes

By the end of the session, you will be able to

- understand the needs of a User Guide user
- analyze a sample User Guide to identify its strengths and areas for improvement
- identify technical writing techniques that make User Guides more user-friendly
- revise your project's User Guide draft so that it is more user-friendly

# Important note



- The lessons on UGDG and Portfolio writing are essentially **technical writing** lessons. The UGDG writing that you do in this course is merely a way to contextualize and concretize general technical writing principles, so that the lessons are meaningful and relevant to you (instead of writing make-believe documents for make-believe software).
- So, today's lesson, and the next lesson on DG writing, as well as the later lesson on Project Portfolio Page writing, are not limited to helping you write your documents for CS2101 and CS2113T/CS2103T submission. They're meant for you to learn **general principles for making your technical documents user-friendly and audience-focused**.
- The PPP assesses your ability to apply what you've learned from your UGDG lessons about writing user-friendly and audience-focused technical documents.



## Software Developer

SmsDome Pte Ltd

Posted On :21 Sep 2017

### ✓ Job Summary

- **Salary:** \$ 3500 - 5250
- **Location:** Singapore - North
- **Work Type:** Permanent / Full Time
- **Min. Education Level:** Degree
- **Field of Study:** Computer Science
- **Years of Experience:** 5
- **Skills:** Communications skills, strong programming skills, Interpersonal skills

### Job Descriptions

#### Job description:

- Responsible for the development of systems and projects through the entire application development life cycle
- Identify modifications needed and implement enhancements in existing applications to meet changing requirements
- Perform database administration
- Investigate and resolve technical issues
- **Produce technical documentation for new and existing applications**
- Provide technical support outside normal business hours when required
- Provide Level 3 technical support



## Software Engineer

Nidec Singapore Pte Ltd

- **Challenging on the Global Standards**
- **For Everything That Spins and Moves**
- **Research and Development for the Future**

### JOB DESCRIPTION

The position requires a highly motivated candidate to carry out creating automation tools based on our products with various commercial/non-commercial CAE software to enhance the strength of each package.

The main task for the software engineer will be:

- Assisting CAE related activities by developing automation codes for thermal & fluid flow, structural, and electromagnetic simulations on motors, cooling fans and other related products using various CFD/FEA tools
- Validation and verification of automation process
- Preparation of technical documents and manuals based on the results obtained
- Participation in technical discussion with CAE team members

# Why do user-friendly user manuals matter?

More than the features and functionalities of the application, **it is the UX which matters today**.

If the customers find the application to be too complicated to navigate or too busy and confusing, then irrespective of how many features and add-ons it provides, it will be left desolated, untouched and unused.

Source: <http://customerthink.com/user-experience-the-new-focus-in-software-application-development/>

**User manuals** play a crucial role in **user experience**—not just with the manual itself, but also with the product. Unfortunately, manuals are often a source of frustration rather than assistance.

Source:

<https://uxmag.com/articles/improving-user-experience-in-manuals>

# From CS2103T website

## Project → Deliverables

Here is a list of main deliverables of the project; their details are given in the subsequent sections.

- Product
  - Executable
  - Source code
- Documentation
  - User Guide
  - Developer Guide
  - Product Website
  - Project Portfolio Page
- Product Demo
- Peer testing results
- Peer evaluation

## Deliverable: User Guide (UG)

- The User Guide (UG) of the product should match the proposed v2.0 of the product and in sync with the current version of the product.
- Features not implemented yet should be clearly marked as **Coming in v2.0**
- Ensure the UG matches the product precisely, as it will be used by peer testers (and **any inaccuracy in the content will be considered bugs**).

# Today: Writing a user guide

1. What is a user guide?
2. Who reads user guides and what are their expectations?
  - What do they use it for? How do they use it?
3. What goes into user guides? (content and structure)
4. How to write clearly, concisely and unambiguously?
5. How to present user guides? (layout and presentation)
6. Paper or online user guides?

# Important note

What you learn about writing the user guide are general technical manual writing principles.

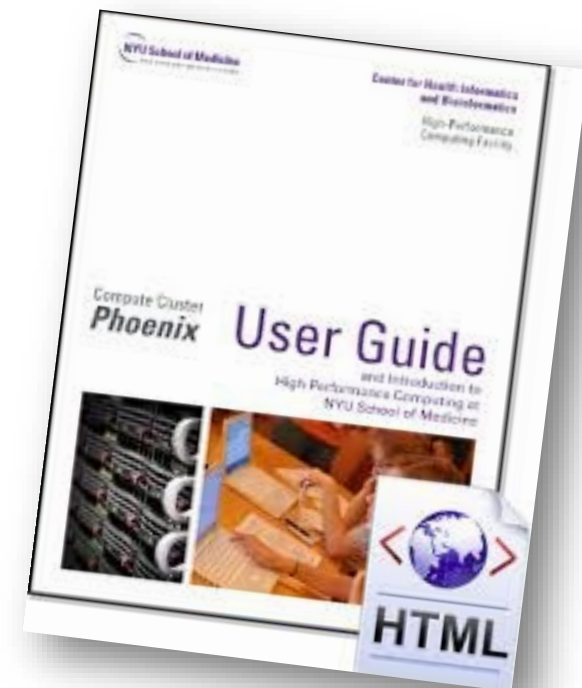
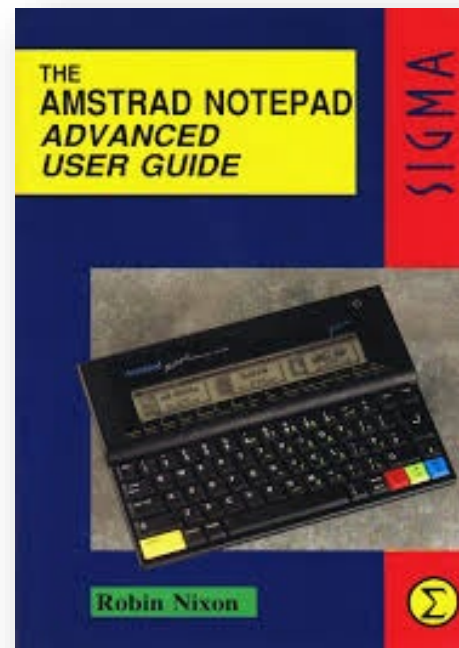
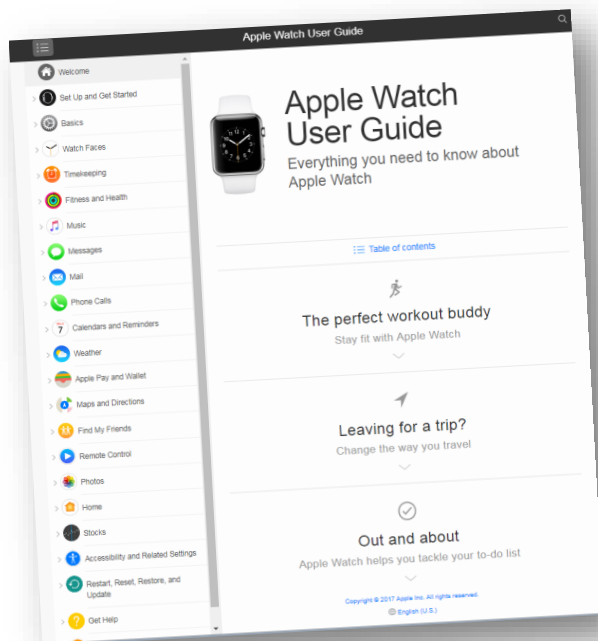
- Your job is to apply these principles to writing your own CS2103T/CS2113T user guide.
- You will need to apply these principles to the best of your ability, given the guidelines and constraints of the module and the media/platform used to display the user guide.

This lesson is not meant to directly tuition you in writing your CS2103T/CS2113T user guide.



# What is a User Guide (UG)?

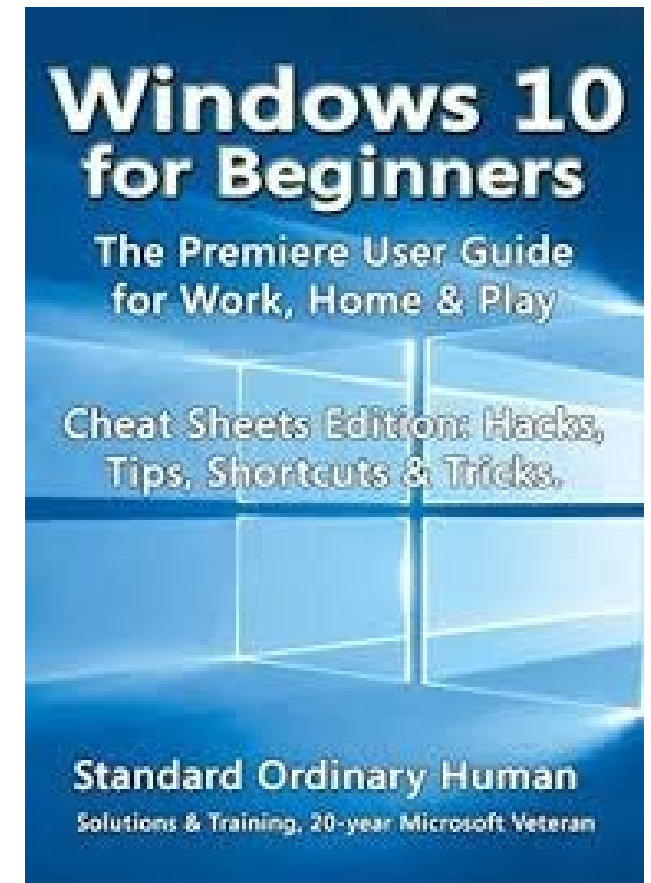
A document that helps (usually non-technical) users to use a product or service, and pinpoint and solve problems without technical assistance.



# Audience analysis

Who are the users of your user guide?

- Level of technical knowledge
- User guide reading habits
- Expectations while reading the guide



# Types of users and their typical needs



## Advanced

- Require brief reminders, trade-offs, alternatives, minimum text and few screen shots. Unusual functions, oddities, shortcuts.

## Competent

- Require brief reminders, explanations of options, alternatives, comparisons with other methods.

## Novice

- Require handholding, no or few assumptions, simple step-by-step instructions (but less detail than absolute beginners).
- Encouragement to learn alternative methods.

## Absolute beginner

- Require handholding, no assumptions, simple step-by-step instructions.
- Many pictures.
- Only one method of achieving a required result.

So, who are the users/readers  
for your project's UG?

# Main challenge: MUST be reader-focused and user-friendly

1. Knowing your readers' needs
2. Using a consistent layout, format and style
3. Writing clearly and concisely with no ambiguity

## Anticipate:

- Potentially confusing sequence, language, formatting, etc.
- Unfamiliarity with terms, symbols, conventions, etc.
- Need for sufficient context or background info
- Need for easy navigation, pleasant layout, approachable language



Simple. Easy. Fast.

# User Guide Journey of Discovery

1. Work in your groups.
2. Download the activity sheet: **User Guide Journey of Discovery** from the IVLE.
3. Discuss answers to the questions in the activity sheet.
4. Be prepared to share your answers and any other observations.



Note:

The following are notes for your reference.

Your tutor will not go through them with you slide by slide. She or He would have covered most of them in the course of the [User Guide Journey of Discovery](#) class discussion.

# Content and structure

1. Cover page
2. Table of contents
3. Introduction/Product overview
4. About
5. Getting started
6. Using your.../Features
7. A compact summary / “Cheat Sheet”
8. Trouble shooting/FAQ
9. Any other helpful information (eg Product specs, Glossary)



## 1. Cover page (stating title of document)

- Many variations, but typical titles are: How to use..., [Product Name] User Handbook, Instructions on Installation and Use of..., Using your..., [Product Name] User Guide

## 2. Table of contents

- the main section titles (Introduction, Getting Started, Features, etc.) are concise but clear in meaning
- the main section titles should be in bold
- the subsections are indented and in normal script (not bold)
- there is white space between dots and the titles and the page numbers

Bold headings

Indent sub-sections

White space

## **PART I Structure and Content of a Manual**

<b>1</b>	<b>Title—table of contents—about—introduction—product overview—what's in the box .....</b>	<b>3</b>
1.1	Title .....	3
1.2	Table of Contents .....	3
1.3	About .....	5
1.4	Introduction / Product overview .....	6
1.5	What's in the box? .....	7
1.6	Specifications .....	7
1.7	Glossaries .....	8
<b>2</b>	<b>KEY FEATURES .....</b>	<b>9</b>
2.1	Key features .....	9
<b>3</b>	<b>INSTALLATION—GETTING STARTED .....</b>	<b>11</b>
3.1	Installation .....	11
3.2	Getting started .....	12
<b>4</b>	<b>USING YOUR .... INSTRUCTIONS – PROCEDURES .....</b>	<b>15</b>
4.1	Giving instructions and writing procedures .....	15
4.2	Don't make assumptions .....	15
4.3	Introduce procedures with a colon .....	16
4.4	Put everything in chronological order .....	16
4.5	Leave one instruction in each sentence .....	17
4.6	Tell the reader about the expected results of each step .....	18
4.7	Put a period at the end of each step .....	19
4.8	Refer to the reader concisely .....	19
4.9	Tips .....	20

White space

### 3. Introduction/Product overview

- Product name and version
- Product features - What your product does (for the reader)

The GIMP (GNU<sup>1</sup> Image Manipulation Program) is a free program to create and edit digital images. You can use the GIMP to touch up photos, lay out web pages, make digital art, produce logos, create animations, and perform many other useful and creative graphic functions. The shadow effect used on the cover title and the screen shots used throughout this tutorial were produced using the GIMP.

The GIMP is available for the Linux, Unix, Windows XP, and Mac OS X operating systems.



Notice that the user guide is written from the reader's perspective – what the product and UG will do FOR the reader, what prior knowledge THE READER needs, etc.

### 4. About

- What this UG does (for the reader)
- Prior technical knowledge needed/assumed (for the reader) to understand this doc
- Assumptions/Conventions/Terminology

## INTRODUCTION TO PHOTOSHOP



Welcome to the *Adobe Photoshop User Guide*! Choose a topic from the left to find answers, get step-by-step instructions, and develop your skills.

Friendly greeting – gives UG  
and Adobe Photoshop a  
“voice”, a personality



How to use this UG



About the software.  
Notice first line  
= one-liner  
description of  
product

# Cumulus Linux User Guide

## Introducing Cumulus Linux

Cumulus Linux is the first full-featured Linux operating system for the networking industry. The **Debian Jessie**-based, networking-focused distribution runs on hardware produced by a **broad partner ecosystem**, ensuring unmatched customer choice regarding silicon, optics, cables, and systems.

This user guide provides in-depth documentation on the Cumulus Linux installation process, system configuration and management, network solutions, and monitoring and troubleshooting recommendations. In addition, the quick start guide provides an end-to-end setup process to **get you started**.

## What's New in Cumulus Linux 3.6.2

Cumulus Linux 3.6.2 contains the following new features, platforms, and improvements:

- **Facebook Voyager** (DWDM) (100G Tomahawk) now generally available
- NCLU commands available for **configuring traditional mode bridges**
- **VRF static route leaking with EVPN** symmetric routing

About this UG

New features

Addressing the reader

Notice the language: Say what your product does, not what it is designed to do

Instead of	Write
<ul style="list-style-type: none"><li>• KwikTrans... was designed to was intended to was aimed at has the following aims</li><li>• This document aims to describe the main features of...</li></ul>	<ul style="list-style-type: none"><li>• KwikTrans produces accurate translations.</li><li>• This service guarantees better results.</li><li>• This machine is 30% faster.</li><li>• This service has the following features: ...</li><li>• This document describes the main features of...</li></ul>

Introduction/Product overview

About the guide

[https://www.prismnet.com/~hcexres/textbook/examples/gimp\\_userguide.pdf](https://www.prismnet.com/~hcexres/textbook/examples/gimp_userguide.pdf)

This tutorial gives an overview of some basic digital editing concepts and shows you how to get started using the GIMP.

This tutorial gives you a brief introduction to some digital editing concepts, shows you how to perform basic GIMP operations, and leads you through an example.

The digital editing concepts — working with image files, layers, filters, and color — are explained and then demonstrated in the example that follows. The example gives step-by-step instructions for creating a pencil sketch or drawing from a color photo.



# Using the Examples in this Guide

The examples in this guide are formatted with the following conventions:

- **Prompt** – The command prompt is displayed as a dollar sign ('\$'). Do not include the prompt when you type commands.
- **Directory** – When commands must be executed from a specific directory, the directory name is shown before the prompt symbol.
- **User Input** – Command text that you should enter at the command line is formatted as `user input`.
- **Replaceable Text** – Variable text, including names of resources that you choose, or IDs generated by AWS services that you must include in commands, is formatted as `replaceable text`. In multiple line commands or commands where specific keyboard input is required, keyboard commands can also be shown as replaceable text.
- **Output** – Output returned by AWS services is shown beneath user input without any special formatting.

For example, the following command includes user input, replaceable text, and output:

```
$ aws configure
AWS Access Key ID [None]: AKIAIOSFODNN7EXAMPLE
AWS Secret Access Key [None]: wJalrXUtnFEMI/K7MDENG/bPxrFiCYEXAMPLEKEY
Default region name [None]: us-west-2
Default output format [None]: ENTER
```

To use this example, type `aws configure` at the command line and press **Enter**. `aws configure` is the command. This command is interactive, so the AWS CLI outputs lines of texts, prompting you to enter additional information. Enter each of your access keys in turn and press **Enter**. Then, enter a region name in the format shown, press **Enter**, and press **Enter** a final time to skip the output format setting. The final **Enter** command is shown as replaceable text because there is no user input for that line. Otherwise, it would be implied.

Explains formatting conventions used in document


Illustrate with example

Explains example - so that the reader knows what to pay attention to, and what the example means. Do not leave it to the reader to decipher the point of the example.





About this UG



Explains terminology and main features – does not assume reader automatically knows what app is about

# 1 Introduction

This guide explains how you can use the Cisco Meeting App to communicate and share information with your colleagues, by creating and using spaces.

spaces are at the heart of the Cisco Meeting App and Cisco Meeting Server setup, unifying voice, video and the web. spaces improve the productivity of individuals and groups, by making it easier to communicate and share information.

## 1.1 Spaces

A space is a chat board and a persistent virtual video meeting room that a group of people can use at any time, and to which guests can be invited for meetings. spaces are always available; no reservations are required. A space can be created for every project and team in your organization. Team members always have access to the chat conversation so information does not need to be repeated.

Cisco Meeting App users can join space meetings using the device of their choice: laptop (Mac or PC), SIP video conferencing system (desk endpoint or meeting room endpoint), iOS device, or phone for audio only.

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**Note:** You can only create and edit spaces if your administrator has given you permission.

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## 1.2 Space users

There are two types of users of spaces: members and guests. A member of a space has more privileges than a guest to the space.

Members of a space can be:

- users with Cisco Meeting App login, who are added as members of the space

Members can:

- join the space video meeting at any time,
- see who else has joined the space video meeting,
- chat in the space and see past chat messages,
- choose to be notified that chats are occurring in the space,
- edit the space.

Guests can be:

- users internal to your organization, but without a Cisco Meeting App login. You will need to send them an invitation to join your space meeting.
- users internal to your organization with a Cisco Meeting App login, but who are not members of your space. You can either send them an invitation, or you can send them the video address of your space and they can join using the New call button.



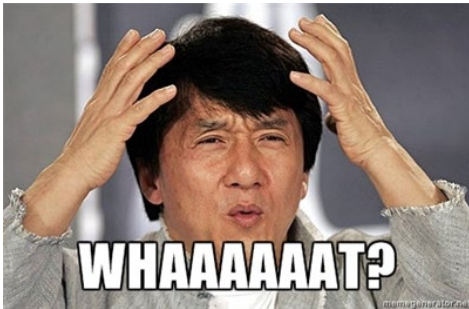
## 5. **Getting Started**

- What needs to be done/to know BEFORE user starts using your product
- Eg Installation, intro to different buttons/windows (“where things are”)
- Be user-friendly - Use visuals

## 6. **Using your.../Features** (instructions and procedures to use various product features)

- Formula:
  - What is the task? (To do..., Doing..., How to...?) – make sure heading formats are consistent
  - Step-by-step instructions in numbered bullets. Visuals are helpful.
  - What is the expected outcome? (eg You will see...)
- One task per section, from basic/simple to more complicated
- One step per sentence/bullet
- Organize information **hierarchically**, e.g. of order
  - Chronology of use
  - Frequency of use
  - Functional categories
  - Expertise level (beginner vs. expert user)
- **Avoid unnecessarily cross-referencing** to other parts of the user manual.

# Writing instructions



## Removing a Favorite channel

To remove a channel from your list of favorites, highlight it on the *Favorite Channels* screen, then press the *Favorite* (yellow) button, the tick will disappear indicating that the channel has been removed from your list of favorites.

Heading

Preface

Numbered instructions

Outcome

## Removing a Favorite channel

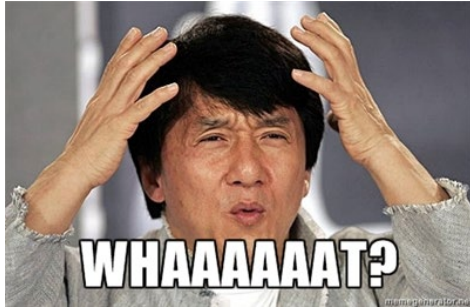
To remove a channel from your list of favorites:

1. Highlight the channel on the *Favorite Channels* screen.
2. Press the *Favorite* (yellow) button.

Outcome: The tick disappears. The channel is no longer in your list of favorites.



# Writing instructions



To defuse the bomb:  
Cut the green wire having first ensured that the red wire has been disconnected.

Numbered instructions and  
written in desired sequence

To defuse the bomb:

1. Ensure the red wire is disconnected.
2. Cut the green wire.



# Check it out yourselves!

Look at the instructions in this UG:

<https://knowledge.hubspot.com/blog-user-guide-v2/how-to-analyze-your-blog-post-performance>

Can you spot these parts of an instruction set?

1. Heading
2. Preface
3. Numbered steps
4. Outcome

# Tips on content

- Tell the user what **functions** there are, and what they are for — not just how to use them...
- Present the **concepts**, not just the features: if users understand the underlying concept of the software, they will more easily understand the features
- Explain the **problem** being addressed: do not just include a detailed description of features, but explain why users would want to use these features.

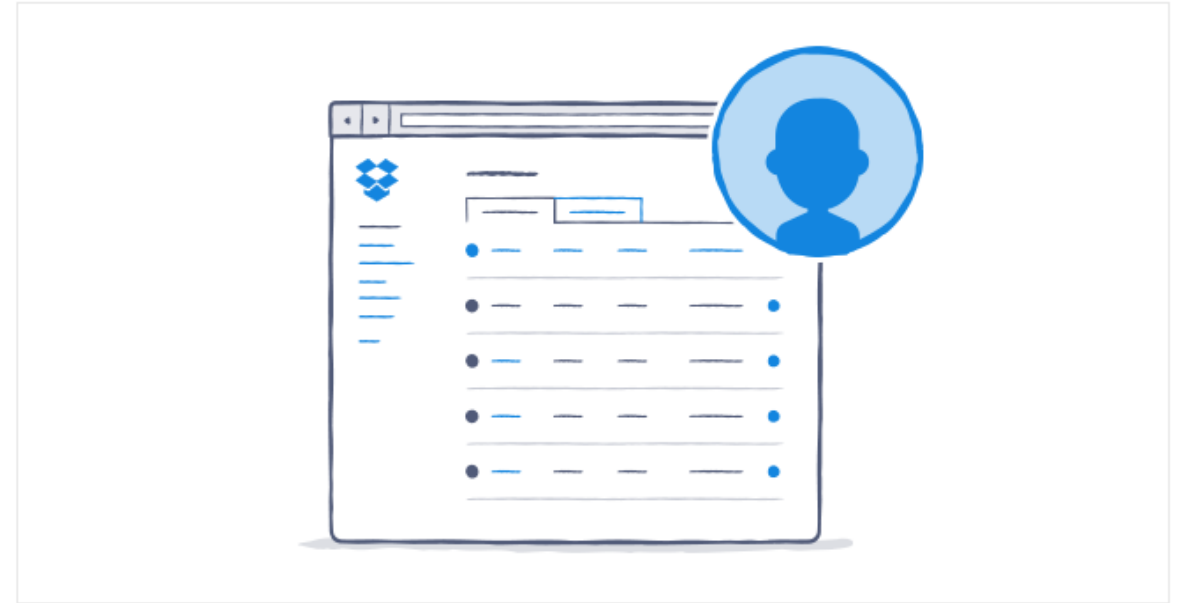
Preface does not merely state “To connect multiple accounts” – too impersonal.

Instead, it explains why user would want to link accounts. Notice use of “you” language to show user benefit.

<https://www.dropbox.com/guide/business/set-up/connect-your-dropboxes>



## Connecting your accounts online



Connecting your personal and work accounts on the Dropbox website is the first step towards getting access to both accounts on your linked devices. It also lets you access both personal and work Dropbox accounts from the web without the hassle of logging in and out multiple times.

- 1 Sign in to your Business account on the Dropbox website.
- 2 Click on your name in the top right corner of the page to open your account menu.
- 3 Select **Connect a personal Dropbox**.
- 4 Create a new personal Dropbox, or sign in if you already have an account.
- 5 Review and confirm your settings.



Preface explains how this feature is useful to the user. Again notice use of you language, and emphasis on user-benefit.

Notice use of heading – readers tend to scan text, so section heading in bold and color are helpful.

Notice use of markup – putting command in a color box. Do this consistently throughout the document to help readers identify commands easily.

### 3.12. Relocating the data file

Are you considering moving Agendum's data files to another file directory? You might want to save your Agendum task list to Dropbox instead, so you can easily access from another device. Agendum offers you the flexibility in choosing where the task list data will be stored. Use the following command:

```
store <new file path>
```

Example:

```
store C:/Dropbox/tasks.xml
```

*Your current task list and all future changes will be saved within the folder "C:/Dropbox" in the file named "tasks.xml".*



Preface goes beyond the starter-kit expression “To analyze your blog post performance”.

Instead, it explains purpose of this tool/function.

Preface to instructions

# How to analyze your blog post performance

Last updated: June 8, 2018

Similar to analyzing your [pages](#), HubSpot provides you with data on your blog and your blog posts' performance. The tool also allows you to:

- See your blog's performance month over month.
- Track which posts are generating the most leads.
- Track your blog subscribers over time.
- Determine which blog authors write the most traffic-generating posts.
- See original source data for posts.
- See how many contacts generated by a post are now customers.
- See SEO suggestions from HubSpot for individual blog posts.

## APPLIES TO:

Marketing Hub:

Basic, Pro, Enterprise

## Instructions

Follow these instructions to view blog traffic, subscriber counts, and analyze individual post performance.

<https://knowledge.hubspot.com/blog-user-guide-v2/how-to-analyze-your-blog-post-performance>



## Editing text

You can edit the text you enter in text fields and cut, copy, or paste text, within or across apps. Some apps don't support editing some or all of the text they display; others may offer their own way to select text you want to work with.

### Edit text

- 1 Touch the text you want to edit.

The cursor is inserted where you touched.

The cursor is a blinking vertical bar that indicates where text you type or paste will be inserted. When it first appears, it has an tab you can use to drag the cursor, to move it where you want.

I just picked up my new shoes. I will wear them to spinning class tonight.




If you previously copied text, the Paste panel appears briefly above the cursor: touch the panel to paste (see “Paste text” on page 54)

- 2 Drag the cursor by its tab to the location where you want to edit text.

The tab disappears after a few moments, to get out of your way. To make it reappear, just touch the text again.

- 3 Type, cut, paste, or delete text (as described in this section)

- 4 Touch the Close Keyboard button  when you're done.

### Select text

You select text that you want to cut, copy, delete, or replace.

- 1 Touch & hold the text or word you want to select.

The selected text is highlighted, with a tab at each end of the selection.

### Preface to instructions



Notice preface uses “you” language and explanation shows attempt to connect with reader, personalize reader experience, to be friendly (compared to merely stating the instructions in a cold and clinical manner, eg “To edit text, follow these steps...”

Source:  
[pdfstream.manualsonline.com/0/0e26bc9e-3821-4d3f-8498-a5a593dd36cf.pdf](https://pdfstream.manualsonline.com/0/0e26bc9e-3821-4d3f-8498-a5a593dd36cf.pdf)

## 7. A compact summary / “Cheat Sheet” / “Quick Reference Card”

**Table 1:** Shortcuts for accessing menus

Type this...	...For this
Ctrl+Shift+F	Full Screen
Ctrl+Shift+H	Hide Tools
Ctrl+Shift+T	Main Toolbar
Ctrl+Shift+D	Draw Toolbar
Ctrl+Shift+O	Draw Options
Ctrl+Shift+C	Color Selection
Ctrl+Shift+S	Status Bar

## 8. Troubleshooting

- FAQs - Predict typical questions/problems that users may have and offer a clear practical solution
- Various formats:
  - Why does...?
  - There is no...
  - Table with error message/problem, reason and solution

Message	Possible reason	What to do now
Please insert your Viewing Card.	There is no viewing card in the 'Viewing Card' slot in your digibox.	Insert your viewing card into the 'Viewing Card' slot.
You have entered your PIN incorrectly three times. PIN is now blocked for 10 minutes.	Your PIN has been entered incorrectly three times in a row.	You will not be able to access anything that needs a PIN for 10 minutes. If you have forgotten your PIN, call your broadcaster's helpdesk. To retrieve your broadcaster's helpdesk number, select the <i>Telephone Numbers</i> option on the <i>Services</i> screen.

OR

Problem	Possible reason	What to do now
You can't find the remote control.		Use the buttons on the front of your digibox. You can perform most digibox functions using these buttons.

Leave cell empty is not relevant/not necessary to fill in



## 9. Any other helpful information (eg Product specs, Glossary)

### 1. General Twitter terms

**@username** – A username (aka Twitter handle) is how you're identified in Twitter, and is always preceded by the @ symbol. For instance, Audiense's username is @AudienseCo.

- Maximum 15 characters, but the shorter the better so as not to eat into Tweet character counts.

**avatar** – Your chosen image that appears next to each of your Tweets and helps to quickly identify you. If you don't select an image then your avatar is the default avatar provided by Twitter.

**bio** – Your bio is a personal description that appears in your profile.

- Maximum 160 characters.

**block** – If you block a Twitter user, that account will be unable to follow you or add you to their Twitter lists. If they mention you in a Tweet you will not be notified. Blocked accounts will not know that you've blocked them, although they may conclude they are blocked as they won't be able to follow you. You can unblock them at any time.

**Direct Message (DM)** – Direct Messages are **private** messages sent from one Twitter user to another. You can **only send a DM to a follower** unless the user has checked 'Receive Direct Messages from anyone' in their [Security and privacy](#) settings on twitter.com.

- Maximum 1000 Direct Messages sent per day. \*
- Maximum 10 000 Characters per message (including links).

\* Make sure you read our [DM Campaigns – Best Practices](#) post.

Writing clearly, concisely and unambiguously

# Tips on language

- Use everyday words and terms: **avoid jargon**.
- Write in **short sentences**. Use **simple present** and **active tenses**.
- Use **direct commands** to the user.  
*e.g. Click 'Yes' and press ENTER to submit your details.*
- Use If-Then if users to show different results from user decisions, e.g.  
*If you choose "Yes," the program will make Firefox your default web browser. If you choose "No," it will set Opera as your default browser.*
- Make it **enjoyable** to read (but keep it professional)

# Address the reader directly



YES		NO	
1	With filters <b>you</b> can focus on the records <b>you</b> are interested in.	The use of filters enables <b>the user</b> to focus on the <b>desired set</b> of records.	
1	If <b>you</b> are familiar with the classic XYZ gateway ...	If <b>the reader</b> is familiar with the classic XYZ gateway ...	
2	When the translation has been completed, the Send button is enabled. This <b>allows you</b> to submit the translation to..	When the translation has been completed, the Send button is then enabled <b>to allow</b> the translation to be submitted to...	
3	If you want to use a filter from a column header, <b>click</b> on the arrow.	Filters are also available on each column header <b>by clicking</b> on the arrow in the column header.	

Manuals are generally intended for one type of reader – the user.

Try to interact directly with the reader by using:

1. **you** instead of *the user* or *the reader*
2. **you** instead of an impersonal or abstract form
3. the imperative instead of the gerund or other grammatical forms when giving instructions. (do not use **you** when giving instructions)

When you use **you**, occasionally the resulting sentence is longer. This is not a problem, the document will still be more readable.

## 2. Make it clear who does what (what is done by the user, what is done by the system)

YES	NO
When <b>you select</b> a language <b>for display</b> in the Languages window, <b>KwikTrans takes</b> the default values for spelling, accents and hyphenation from the language's details.	When a language <b>is selected and displayed</b> in the Languages window, the default values for spelling, accents and hyphenation <b>are taken</b> from the language's details.

Readers need to know who does what. Do they have to do something, or are other people (e.g. the systems administrator, a technician) or systems involved?

Such confusion and ambiguity often result from the use of the passive form.





### 3. Be concise

Don't use:

1. meaningless abstract words
2. meaningless descriptive words
3. unnecessary introductory phrases
4. unnecessary link words
5. references to earlier unspecified parts of the document
  - eg: *as mentioned above, as already stated*
  - Remember: Your reader will not read your document starting at page 1 and finishing at page 100.



	YES	NO
1	This supports the installation.	This supports the <b>activity</b> of installation.
1	Achieving this is difficult.	Achieving this is a difficult <b>task</b> .
1	We believe the results are significant.	We believe the results are of significant <b>value</b> .
2	They should be green and round.	They should be green <b>in color</b> and round <b>in shape</b> .
3	Note that the sum of the values needs to be lower than....	<b>It is worth noting / Bear in mind</b> that the sum of the values
4	This component does not support XYZ.	<b>Furthermore / In addition / In particular / It is worth noting that</b> this component does not support XYZ.
5	Market data are not required by the system.	<b>As stated above</b> , market data are not required by the system.

#### 4. Use the simplest word possible

YES (according to STE)	NO (according to STE)
show	demonstrate
help	facilitate
start	initiate
change	modify
stop, end	terminate

**\*\*STE - ASD STE-100 Simplified Technical English**, or **Simplified English**, is the original name of a [controlled language](#) specification originally developed for [aerospace](#) industry maintenance manuals. It is a carefully limited and standardized subset of English. It is now officially known under its trademarked name as *Simplified Technical English* (STE). STE is regulated for use in the aerospace and defense industries, but other industries have used it as a basis for their own controlled English standards.

Source: [https://en.wikipedia.org/wiki/Simplified\\_Technical\\_English](https://en.wikipedia.org/wiki/Simplified_Technical_English)

## 5. Use the most specific word

Instead of	Write
Open the CD tray.	-
Open the setup.exe file.	Run...
The Print dialog opens.	The Print dialog is displayed.
The application opens automatically.	The application starts automatically.

# Layout and presentation

- Instructional design

- use task-oriented headings for easy access (eg Adding..., Editing...)
- explain more complex tasks in numbered lists (step 1, step 2, ...)
- “chunk” related tasks together
- include tables for ‘look-up’ information. Eg like OS types, minimum system requirements
- give examples

- Graphics

- Screenshots, charts, diagrams, before and after views

- Special notices or callouts

- warnings, cautions or alerts, to alert readers to important points – use consistent format throughout document

# Use the right bullet



Round bullets or dashes when sequence of items is not important

Numbered bullets when sequence of items is important, eg instructions

	YES	NO
1	To install the system you need: <ul style="list-style-type: none"><li>• Version 5.6 or later of Technophobe</li><li>• Version 1.2 or later of Monsterniac</li><li>• Version 9.7 or later of SysManiac</li></ul>	To install the system you need: <ol style="list-style-type: none"><li>1. Version 5.6 or later of Technophobe</li><li>2. Version 1.2 or later of Monsterniac</li><li>3. Version 9.7 or later of SysManiac</li></ol>
2	The project is organized into three phases: <ol style="list-style-type: none"><li>1. Specifications</li><li>2. Design and development</li><li>3. Release</li></ol>	The project is organized into three phases: <ul style="list-style-type: none"><li>• Specifications</li><li>• Design and development</li><li>• Release</li></ul>
3	To replace a word or phrase: <ol style="list-style-type: none"><li>1. Select Replace from the Edit menu</li><li>2. Type in the word you want to replace</li><li>3. Click OK</li></ol>	To replace a word or phrase: <ul style="list-style-type: none"><li>✓ Select Replace from the Edit menu</li><li>✓ Type in the word you want to replace</li><li>✓ Click OK</li></ul>

Tick bullets – usually to list product features or in checklists. Not used for instructions.

# Tips on organisation and presentation

- Make purposeful and effective use of colour.
- Make effective use of pictures and diagrams.
- Provide lots of white space.
- Use a clean, readable san-serif font.
- Highlighting/markups: can be useful if used consistently and judiciously

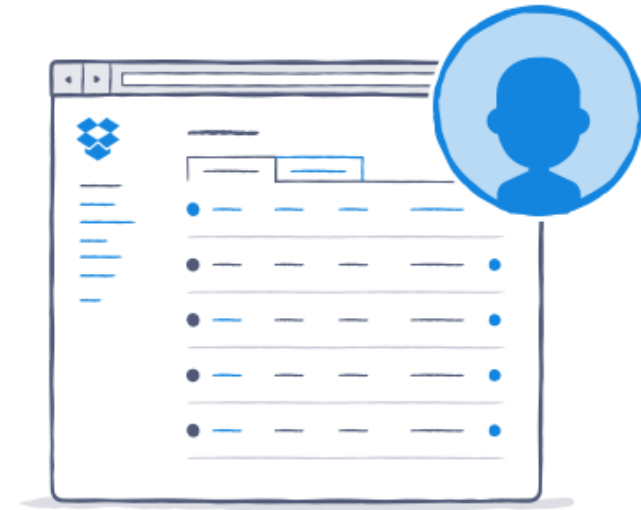




Notice use of formatting to make reading easy

- Bold heading
- Bold “Connect a personal Dropbox” to show that this is a button
- Graphic is inlaid, clean and crisp
- Instructions are numbered clearly
- Use of blue color numbering to focus reader’s attention
- Lots of white space so reader is not overwhelmed with text

## Connecting your accounts online



Connecting your personal and work accounts on the Dropbox website is the first step towards getting access to both accounts on your linked devices. It also lets you access both personal and work Dropbox accounts from the web without the hassle of logging in and out multiple times.

- 1 Sign in to your Business account on the Dropbox website.
- 2 Click on your name in the top right corner of the page to open your account menu.
- 3 Select **Connect a personal Dropbox**.
- 4 Create a new personal Dropbox, or sign in if you already have an account.
- 5 Review and confirm your settings.

# Examples of markups and callouts

## 3.4.2. Edit Deadline of a Task

You can use this command to edit the deadline of a task.

Command format: **edit** <task ID> **by** <new date time>

```
edit 2 by tmr 9pm
```



Markup example -  
use of colored text  
and different font  
to highlight  
command

**!** Not case-sensitive → Tue, TUE, tUE, all mean Tuesday

**!** Type at least the 1<sup>st</sup> three letters of any month and day → Feb, Febru, Febr all mean February

Markup example –  
use of colored box  
and exclamation  
mark to indicate  
warning

# Examples of markups

## 3.9. SORT

You can use the SORT command to sort tasks in the List Panel according to alphabetic order or date.

The format to sort a list of tasks is :

```
sort < date | name >
```

*The tasks will be shown based on the parameters specified.*

For example:

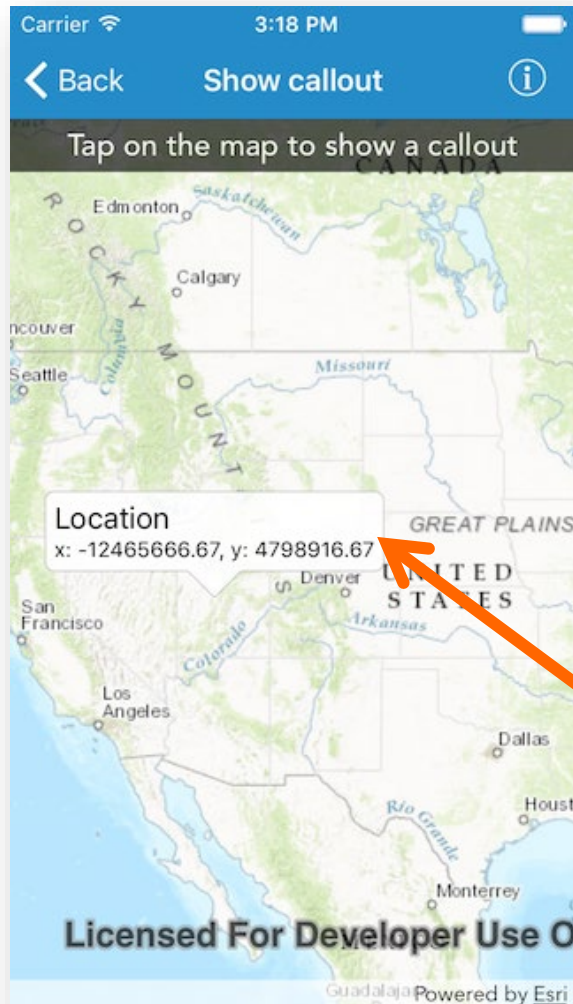
- `sort date` will sort the list of tasks based on their dates, displaying the closest deadlines at the top.
- `sort name` will sort the list lexicographically.



Notice how use of markups makes it clear that the parts in dark grey are command phrases.

Without these dark grey markups, it would take time for the reader to decipher which part of the sentence is the command phrase.

# Examples of callouts



Callout box to show location coordinates on a map



Callout examples – orange callouts with arrows to provide additional information

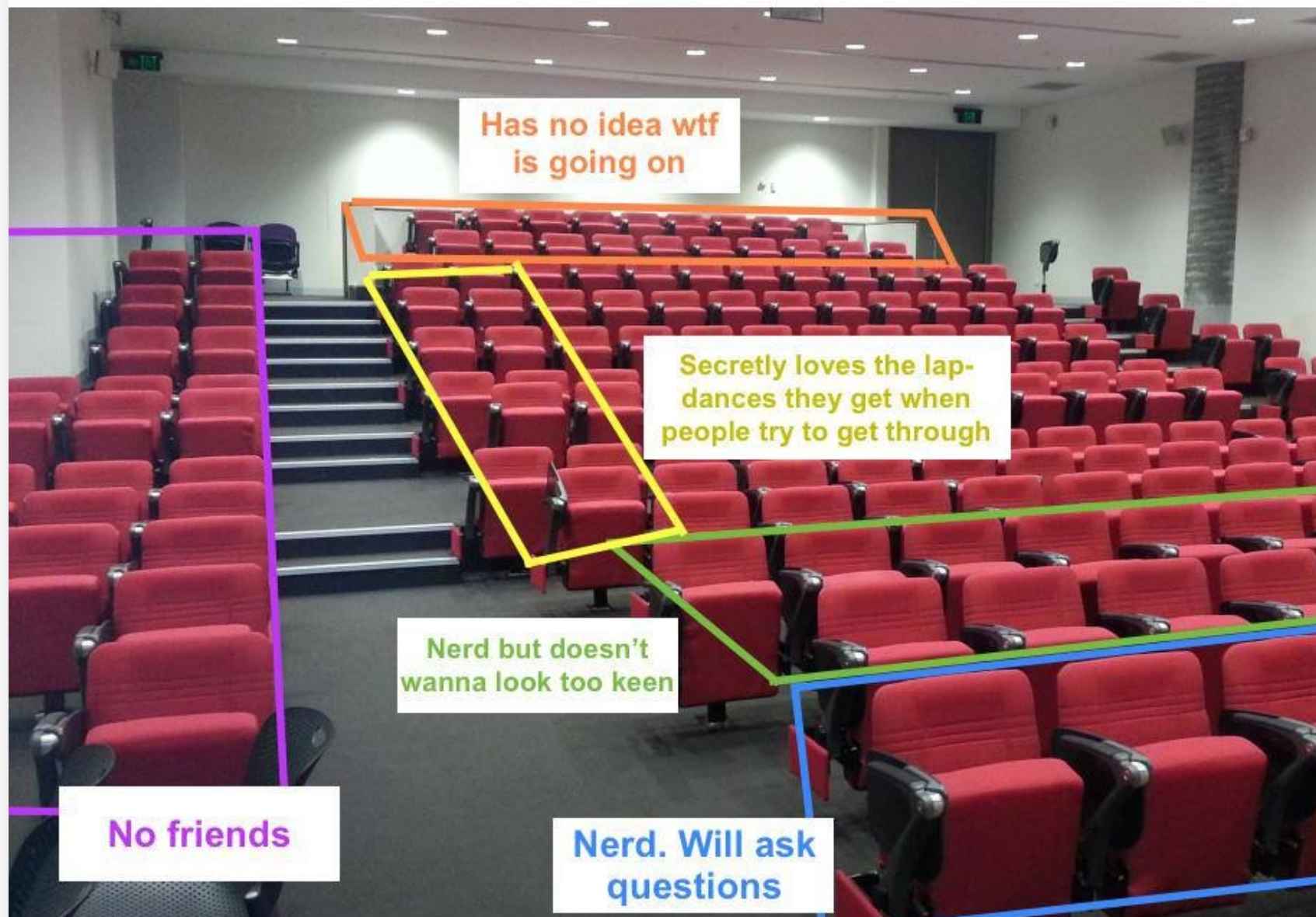




## Lecture Theatre Seating Breakdown



Callouts are great for identifying parts of your user interface; eg to tell the user where to type the command phrase, which part of the screen is the result window (where the result of their command will be displayed), what certain numbers / abbreviations mean in the result display, etc.





# Common issues from previous user guides

- Written as a specification, not a user guide
- Too formal, too clinical, no personality
- Not addressing the user, not speaking to the user
- Forward referencing – referring to things not explained yet
  - Providing instructions for deleting tasks before instructions on viewing a list of tasks
  - Providing instructions on how to assign task number/ID before explaining what task number/ID is
- Using terms unfamiliar to users
- Not enough examples, not explaining examples, not illustrating examples
- Not showing how app would respond to user' actions, not assuring readers that they have executed your instructions correctly
- Not enough UI (user interface) prototypes

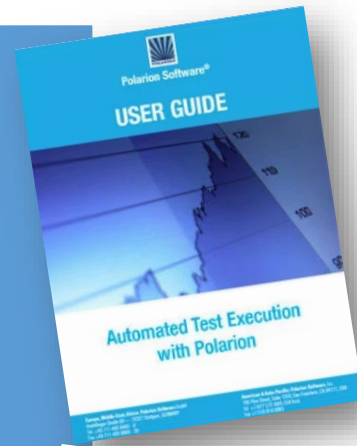
Print Manuals

VS

Online Manuals

VS

Video tutorials



What are the differences?  
What are the implications?

Find out more:

<https://www.techscribe.co.uk/techw/paper-v-online.htm>

# Remember:

## Four key elements for effective guides

1. Knowing the audience
2. Consistent styles and templates
3. Visuals
4. Proof reading





An iceberg floating in the ocean. The tip of the iceberg is above the water line, and the much larger base is submerged below the water line. The sky is blue with some clouds, and the water is a deep blue.

What we covered today

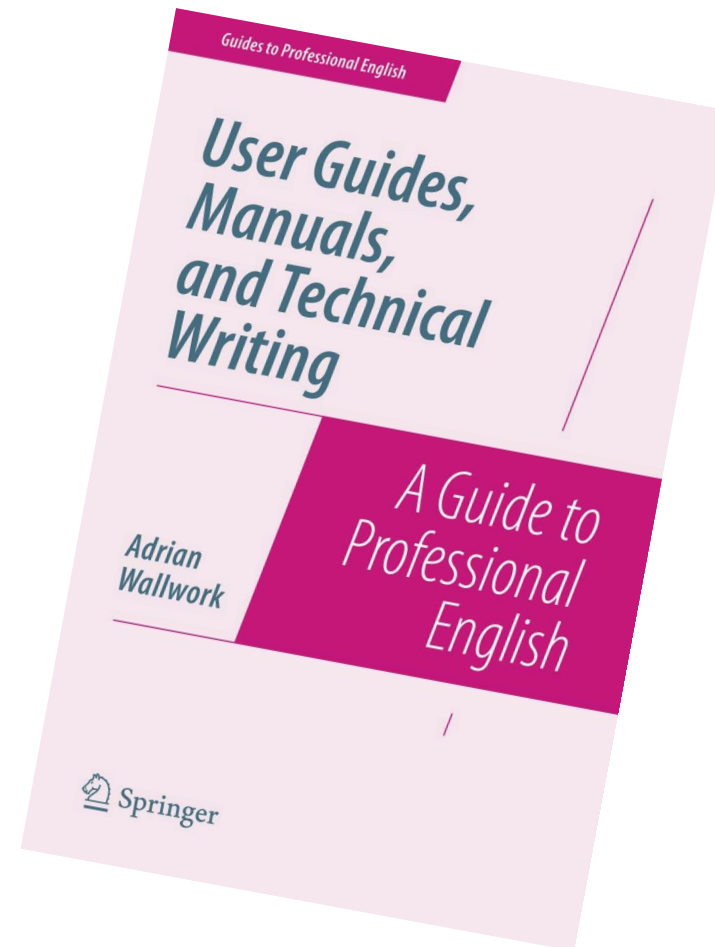
So many more great  
tips for writing user  
guides

Please find out more.  
Start with the link in the  
next slide.

# The guide to writing user guides

Ebook available on NUS library website:

<https://link-springer-com.libproxy1.nus.edu.sg/book/10.1007%2F978-1-4939-0641-3>



# Resources for technical writing and user guides

- Hargis, G. et al. (1998). *Developing quality technical information: A handbook for writers and editors*. NJ: Prentice-Hall.
- Kaplan-Moss, J. (2009). Writing great documentation: Technical style. Retrieved from <http://www.jacobian.org/writing/great-documentation/technical-style/>
- Martinez, D., Peterson, T., Wells, C., Hannigan, C. & Stevenson, C. (2011). *Kaplan technical writing: A comprehensive resource for technical writers at all levels*. New York: Kaplan Publishing.
- McMurrey, D. (n.d.) Online technical writing: User guides. Retrieved from [https://www.prismnet.com/~hcexres/textbook/user\\_guides.html](https://www.prismnet.com/~hcexres/textbook/user_guides.html)
- The Gnome Project (2005) Fundamental concepts of technical documentation. Retrieved from <https://developer.gnome.org/gdp-style-guide/2.32/fundamentals.html.en>
- Userfocus (2007). Tips for writing user manuals. Retrieved from <http://www.userfocus.co.uk/articles/usermanuals.html>
- Walsh, I. (2007) User Guide tutorial. Klariti.com tips + tools. Retrieved from <http://www.klariti.com/technical-writing/User-Guides-Tutorial.shtml>

# Authentic samples from the industry

- GIMP (online version)

<https://docs.gimp.org/en/index.html>

- Apple Watch User Guide (online)

<https://help.apple.com/watch/>

- AWS Command Line Interface user guide

<https://docs.aws.amazon.com/cli/latest/userguide/aws-cli.pdf>

- HubSpot Blog

Recommended viewing

[https://knowledge.hubspot.com/blog-user-guide-v2?utm\\_campaign=UserGuides&utm\\_medium=UserGuidesHomepage&utm\\_source=Academy](https://knowledge.hubspot.com/blog-user-guide-v2?utm_campaign=UserGuides&utm_medium=UserGuidesHomepage&utm_source=Academy)

# Activity – Revising your UG

CS2103T/CS2113T will run a peer-testing session for your product. Your peers will need to use your UG to operate your software. So, make your UG as user-friendly as possible so that they will be able to easily navigate your software.

In your teams, revise your User Guide so that it is more reader-friendly, using the tips discussed in this session.

# Deliverables for UGDG

- 20/21/22 Mar: UG in-class peer review
- 1/2 Apr: DG in-class peer review
- After peer review
  - Submit peer review reports to LumiNUS
  - Make the necessary revisions to UGDG for your testers
- On 15 Apr
  - Submit UGDG final copy to CS2103T/CS2113T **AND** CS2101.



**\*\*Deadlines for UGDG drafts may be different for CS2103T/CS2113T**