Designing and Writing Procedures

Slides to support teaching from the chapter “Designing and Writing Procedures“ in

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Procedures explain how to *do* something

Also called “instructions”

Similar to procedures:

- Process descriptions
- Product demos
- Functional descriptions (for instance “tool tips”)
Functional descriptions

Functional descriptions tell you what a UI element is for. But they don’t explicitly tell you what to do.

Valve labeled “Pressure release”

Tool tip
Where do we find procedures?

How good are they?

What problems do we see?
Instructions for a digital consumer product

User Manual
Manual del usuario
Mode d’emploi

Using the Portable Battery to Charge a Device:
1. Use the original USB cord for the device you wish to charge. Plug the portable battery into the device.
2. Press the power button and wait for the LED indicators to turn on. Charging should start automatically and the LED indicators will stay lit throughout the charging process. When the portable battery is depleted, the portable battery will automatically turn off if it is not plugged into a device.
3. Charging will automatically stop when the portable battery has run out of battery.
4. To turn off the portable battery, manually press the power button. The LED indicators should turn off once the portable battery is off.
5. If the device has finished charging before the portable battery has run out of battery, immediately turn the portable battery off and disconnect it from the device.

Charging the Portable Battery:
1. Once the portable battery has been depleted, plug it into a USB charger using the USB to micro USB cable included.
2. During charging, the LED indicators will turn on and indicate the level of charge. The LED indicators will turn off when the portable battery has been fully charged. If the portable battery has been fully charged, no LEDs will turn on until the portable battery has been charged. LEDs turn off as the portable battery becomes fully charged.
3. Once fully charged, all LEDs will turn off.
4. The portable battery should be fully charged before first use and should be fully discharged and charged once every three months for maximum life.

Using the Power Flash Highlight (PWR1075):
1. To turn on the flash function, press and hold the power button for 3 seconds.
2. To turn off the flash function, press and hold the power button for 3 seconds.

Power Indicator:
Press the power button to check remaining power.

Power Status:
If no LED indicator lights turn on, the portable battery may need to be charged.

Important Safety Instructions – Save These Instructions:
Read all instructions and warning prior to using this product. Improper use of this product may result in product damage, electric shock, fire, or explosion.

1. SAVE THESE INSTRUCTIONS. DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.
2. Do not use in high temperatures, including intense sunlight.
3. Do not dispose of the portable battery if it has been subjected to shock or damage. Contact the manufacturer or take it to a qualified technician for repair.
4. Do not attempt to disassemble, repair, or modify the portable battery in any manner.
5. Do not expose the portable battery to rain or moisture. For indoor use only.
6. This portable battery is not intended for use by children. Child handling may cause injury or death. Use with adult supervision.
7. This portable battery is not intended for use by children or persons with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge without supervision. Portable battery must be recycled or disposed of safely and in accordance with local laws.

Limited 1 Year Warranty: This product is warranted to be free of defects in material and workmanship for 1 year from date of purchase. Dated receipt required. Defective product will be repaired or replaced with a product of equal value. This is your sole remedy in lieu of all other remedies, including consequential damages (see website for additional terms and conditions). Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. For warranty service, call 1-888-ASCENT. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.
Standard procedures consist of a

1. Title
2. Introduction (optional)
3. Steps
4. Feedback statements (optional)
5. Notes (optional)
Import Your Music

The Tuner Music Importer helps you add your personal music collection to your music library on the Tuner website, so you can play it from all of your connected Tuner Music devices.

1. Go to your music library from a web browser on the computer you want to import music from.
2. Click Upload your music in the left menu. If prompted to install the Tuner Music Importer, follow the on-screen instructions.
3. Once you've opened or installed the Tuner Music Importer, click Start Scan to automatically scan your iTunes and Windows Media Player libraries for songs to import. You can also click Browse manually to browse files on your computer to find music. This process may take some time to complete.
4. After the Tuner Music Importer has located your music, click Import all to add the entire selection to your music library. Or, click Select Music to choose which songs you'd like to add.

Note:
- You can import up to 250 songs to your music library for free. With a Tuner Music subscription, you can import up to 250,000 songs. To learn more, go to Change Your Tuner Music Subscription. Tuner Digital Music purchases do not count towards library limits.
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Preview: Components of procedures

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Domain (“subject matter”)

The domain of a procedure matters a lot to writers
- Digital systems
- Mechanical/electrical systems
- Objects in physical world
- Intangible (e.g., leadership, running a meeting)

Which domain is likely to be the most difficult?
System state

Procedures vary a lot according to the initial state of the system and how the user wishes to change that state

• Assembly, installation, configuration
• Operation (routine and emergency)
• Troubleshooting
• Dismantling and recycling
Audiences differ

• Different backgrounds and abilities
• Different goals and information needs
  • How much do they want to know?
  • Do they want to retain the content?
• Different cultures
... But they also share important traits

• Have limited short-term memory (minimize “cognitive load”)

• Like examples

• Are impatient (want to do work, not read instructions)
Procedures communicate via the following (usually in combination):

- Text
- Images (diagrams, drawings, screen captures, photographs)
- Video
- Voice
Example: Video procedures
What about graphics? What about video?

Graphics show users what you’re referring to—where something is and what it looks like.

How to identify knotweed

Resize corner  Status bar

Video is especially good at showing actions and movement

How to remove knotweed by herbicide injection
Procedure exercise: Part 1
Writing a procedure for Lego construction

1. Keep your Lego brick object hidden from the other team in your group.

2. Spend 10 minutes writing a procedure that will enable your audience, the other team, to replicate your object. Visuals cannot be used.

3. Exchange procedures. Then, working for 10 minutes, try to replicate the other team’s object.

4. Reveal the objects. Discuss the differences in the procedures and how well each procedure worked.
Tips for writing your procedure

- Think about the points of the compass, alignment, corners, and offsetting a Lego brick one position from the edge.
- Use techniques such as a limited amount of redundancy to prevent errors.
Procedure exercise: Part 2
Space invaders are attacking Earth. We can stop them with Legos!

The space invaders are afraid of another race of aliens who fly around in a wide variety of Lego-like space craft.

Our only hope is to create billions of small objects resembling these space craft. Each Earth dwelling needs one to ward off the invaders.
Revise your procedure

• Make clear that color doesn’t matter. Any color Legos will do.
• Should the Legos be glued together?

Use whatever components you need.

1. Title
2. Introduction
3. Steps
4. Feedback
5. Notes
Automating your work
Using macros
Automate your work with macros
How to use our built-in macros
How to save time by automating your work with our built-in macros
Introduction (if needed)

One or two paragraphs that elaborate on the title

“Is this really what I want to do?”

State anything the user should know before starting to carry out the procedure (or deciding not to)
Create a hanging indent

With a hanging indent, the second and all the following lines of a paragraph are indented more than the first. The fastest way to add a hanging indent is to use the ruler.

1. Select the text where you want to add a hanging indent.

2. Click **View** and then select the **Ruler** checkbox to **Show rulers**.

3. Drag the hanging indent marker (shown below) to the right. It’s the lower triangle on the ruler.

A graphic would be helpful
Saving as text (.txt)
When you save a file in text format, the file size decreases greatly, and you will be able to open the file in a wide range of applications. **Caution:** All your formatting will be lost.
Sealing a case
When you seal a case, the contents of the file can no longer be changed in any way. A case can only be sealed if the Enable Sealing option was chosen when the case was created.
Steps

Steps are the central component of procedures. They tell the user to do something—and how.

Press the **On** button.

On the **Home** tab, in the **Styles** group, click . . . .
Do-it steps

Express a simple action:
Press the **On** button.

Can also show location:
On the **Home** tab, in the **Styles** group, click . . . .

Can also explain how to carry out the action:
Release the catch mechanism by pushing firmly on the ends of both latches.
Feedback statements

Feedback statements are sometimes added to Do it steps and other steps as well. They describe explicitly the result of carrying out a step. They can give the user confidence and help prevent errors.

Tap any note in your document. Blue boxes appear around all the notes.
User option steps

Offer an opportunity to achieve a variation on the main goal

If you prefer a crispy-crust pizza, do not use a baking sheet and bake the pizza at 375 degrees.

Click the files you wish to archive. To select multiple adjacent files, drag the mouse pointer over these files.
Conditional steps

Explain how to identify and address an unwanted condition. These are not presented as options.

If you are in the Transactions view, switch to the Report view.

If the System Load indicator shows high activity, launch a subsystem before proceeding further.
This one is different. What’s going on here?

Rap periodically on the filter housing to ensure maximum suction.

Click **Bottom** to complete the first box.

• Is this just a simple “Do it step?
• Is this a user option?
• Is this conditional?
Local purpose steps

Often added to a Do It step. They add extra words explaining why this step is necessary.

During prolonged use on very dusty surfaces, rap periodically on the filter housing to clear it of dust and ensure maximum suction.

May also serve as milestones in a long procedure: Click **Bottom** to complete the box.
Feedback statements

Feedback statements are sometimes added to steps. They describe explicitly the result of carrying out a step. They can give the user confidence and help prevent errors.

Tap any note in your document. Blue boxes appear around all the notes.
Notes and tips

Notes and tips include all kinds of useful information. They can appear anywhere in a procedure. Use sparingly.

**Tip:** Make sure you click on the tip of the triangle.
Notes, warnings, tips

Notes and tips include all kinds of useful information. They can appear anywhere in a procedure. Use sparingly.

**Tip:** Make sure you click on the tip of the triangle.

Cautions and warnings must be highly visible and appear before the place in the procedure where the user can get into trouble.
Sports video exercise

• A celebrity athlete who demonstrates how to serve a tennis ball, hit a golf ball, etc.
• On-screen host for the intro and conclusion
• Off-screen narrator who explains action in detail
• Videographer
  • Fingers simulate a camera lens. Moves toward action for close-ups. Stiffens fingers for “freeze.” Rolls fingers slowly for slow motion.
• Director

Everyone contributes to the script