



Prototyping With Visio

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Optimal Usability
- About Visio
- What I use it for, and when
- Productivity tips
- Testing prototypes
- Documenting designs



About Visio

- Windows diagramming tool (vector shapes)
- Standard MS Office UI
- Visio Standard = \$\$
- Visio Pro (with UI stencils) = \$\$\$\$
- Lots of stencils/templates available
 - Included in Visio
 - Third-party (free or commercial)



What I Use It For, and When

I use Visio 2003 Pro for:

- Site maps
- Task flows
- Screen sketches (low-fidelity)
- Screen mockups (high-fidelity)
- Documents that need freeform layout



Site Maps

- Includes stencils for building site maps
- Can auto-generate site maps (not very useful, IMO)
- Has smart connectors that glue to shapes
- Site maps do not auto-update based on other parts of your design
 - But Visio 2007 has dynamic data-driven shapes
 - And other tools (e.g. Intuitect) offer this
- Several free site-map templates/stencils available (google 'em')



Task Flows – Method 1

- Create flow pages separate from screen pages
 - Flows created on “normal”-size pages (e.g. A3, A4)
 - Screens created on separate pages (e.g. A3, A4)
 - Flows and screens cross-reference each other
 - Boxes in flows can hyperlink to screens
- Pros
 - Easy to create
 - Easy for stakeholders to view/print
- Cons
 - Have to flip a lot of page to see the bigger picture
 - Have to maintain cross references (or use helper add-ons)



Task Flows - Method 2

- Integrate screens into the flow on a poster-size page
 - Zoom out for the big picture
 - Zoom in to edit screens
 - Print using a large-format printer (a.k.a. plotter)
- Pros
 - Everything for a task is on one page
 - Easy to see what happens if you click that button
 - Can grasp complexity at a glance
 - Mounting posters is great for “walk-by” communication
 - No cross-references to maintain
- Cons
 - Large-format printers may not be available
 - Users need big screens to comfortably view the design



Sketches vs. Mockups

- Sketches are:
 - Faster to create
 - Less effort invested = easier to throw away
 - Communicate the “preliminary” nature of the design
 - Encourage more user feedback at the right level of detail
 - Are more fun!

- Make sketches by:
 - Using irregular shapes
 - **Not** aligning shapes (turn off the grid, no nudging)
 - Using a handwritten font (e.g. Domestic Manners)
 - Find free fonts at www.1001fonts.com

Automatic Updates

Automatic Updates



Help protect your PC

Windows can regularly check for important updates and (Turning on Automatic Updates may automatically update software first, before any other updates.)

[How does Automatic Updates work?](#)

 Automatic (recommended)


Automatically download recommended updates for your computer and install them:

Every day

Download updates for me, but let me choose when to install them.

Notify me but don't automatically download or install updates.

Turn off Automatic Updates.



Your computer will be more vulnerable unless you install updates regularly.

Install updates from the [Windows Update Web site](#).

[Offer updates again that I've previously hidden](#)

OK

Cancel

W Windows Update

Blah blah blah blah blah blah blah blah blah blah.

[How does Automatic Updates work?](#)

Automatic (recommended)

Download updates for me, but let me choose when to install them.

Notify me, but don't automatically download or install them.

Turn off Automatic Updates.

Your computer will be more vulnerable unless you install updates regularly.
Install updates from the [Windows Update Web site](#).

OK

Cancel

Apply



Productivity Tips – Getting Around

- Navigating pages
 - Page tabs (at bottom)
 - Drawing Explorer (auto-hide by “unpinning” it)
 - Ctrl-PageUp/Down
- Panning/zooming
 - Pan/Zoom mini window
 - Ctrl-Shift-RightMouseDown-drag
- Maximizing the work area
 - Hide the side panels, status bar
 - Zoom to fit
 - Maximize by changing page-size units (e.g. inches (decimal) seems to work well)



Productivity Tips – Screen Elements

- Use “master” background elements
 - Can be progressively layered (masters can use other masters)
 - Add “smart” page titles and page numbers (Insert Field)
- Snap to grid
 - Medium- or high-fidelity mockups - use
 - Sketches – don’t use
- Use the pasteboard for hidden storage (outside print area)
- Ease object selection by protecting background areas
- Obfuscate text for presentations by using an unreadable font (e.g. Symbol)
- Cloning items
 - Duplicate (Ctrl-D) preserves clipboard contents
 - Format Painter is a quick way to copy appearance only



Productivity Tips - Annotations

- Some layouts include a text block on the side
- Callouts
 - Color-code (comments, issues, wishes, etc.)
 - Use Format Painter to convert between types
 - Usually in margins
 - Over screens – add a drop shadow for clarity
 - Put on a separate layer
 - Hide notes when presenting, or when printing for paper testing



Testing Prototypes

- Paper testing
 - Hide notes
- Basic interactivity (wireframes)
 - Clickable links and buttons
 - Add multiple links to model simple case logic
 - Have to create all likely variations, “fake” input
 - Show using Visio or Visio Viewer
 - Acrobat Pro integration – produces PDF with clickable links
 - Can add form simulations inside Acrobat
- Advanced interactivity (mockups)
 - VBScript scripting?
 - May be better off using VB itself for substantial interactivity



Documenting Designs

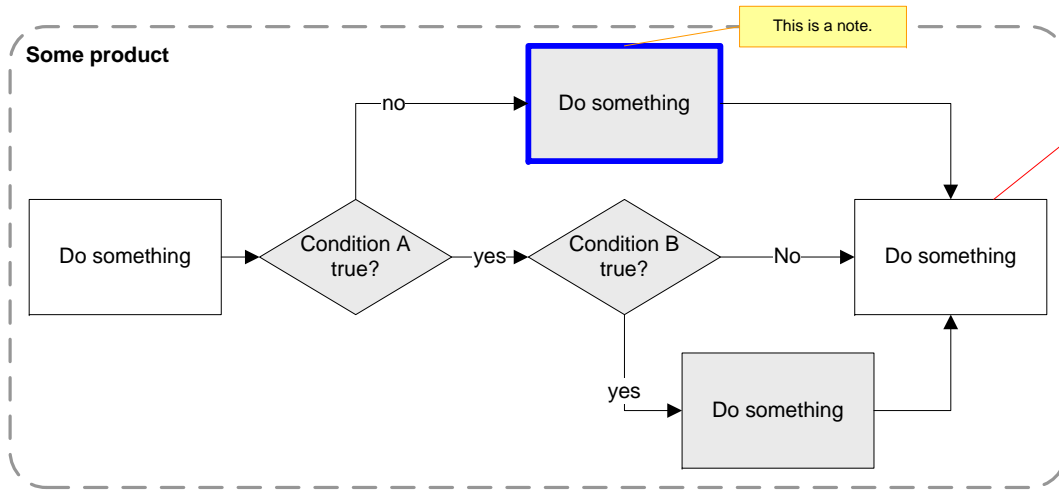
- Visio as spec
 - Flows and diagrams with annotations
 - Can leave clickable paths intact
 - Can view with Visio Viewer
 - Can save as PDF (and then print)

- Adding to Word specs
 - Embed Visio diagram (OLE object)
 - Can edit mockups inline, but feels clumsy
 - Makes BIG Word files

 - **Better** – take a screenshot of the Visio diagram
 - Paste into Word as a picture
 - Keeps file sizes very small
 - But have to update screenshots manually

Task flow (method 1)

This is a to-do.



This is a note.

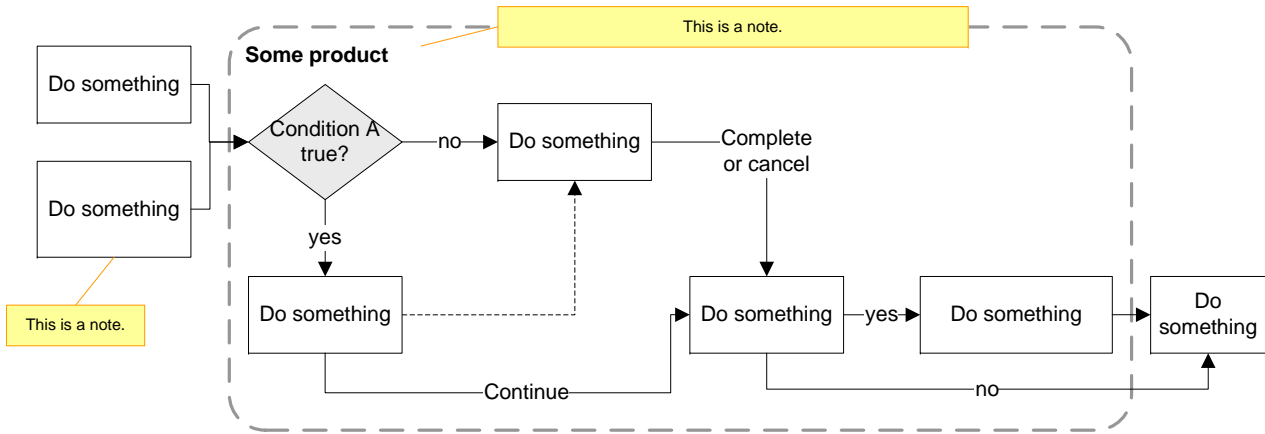
This is an issue.

This is an issue.

This is an issue.

This is an issue.

This is an issue.



This is a note.

This is a note.

This is an issue.

This is a note.

Sample sketch (low fidelity)

Replace with a handwritten font (e.g. Domestic Manners)

SP SuperProduct 2007

Blah blah blah blah blah:

- Blah blah blah blah blah
- Blah blah blah blah blah

This is an issue.

[Empty rectangular box with a vertical double-headed arrow on the right side]

Total: 7.8 Mb, 2 minutes

Build quickly. Don't fuss over fine details.

[Blah blah blah blah](#)

Blah Blah

Blah Blah Blah

Sample mockup (high fidelity)

Form Title

Summary Properties A very long title **Advanced**

Appearance

Type

Snap to grid

Saturation

Notes

Enter Text
Enter More Text

Enter Text

OK Cancel

Visio Pro includes stencils for Windows UI controls. They're pretty smart too.

SuperProduct UI Specification

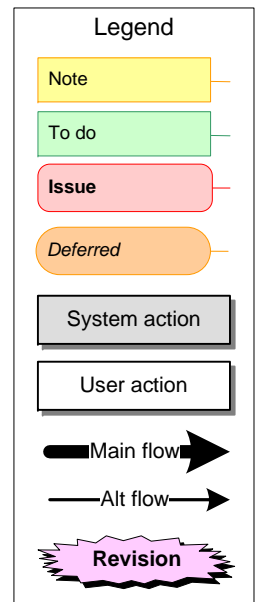
UI Designer: [Your Name](#)

Source: [Project Repository > Design > Version 1.2](#)

General Notes:

- Blah blah blah blah blah blah blah blah:
 - Blah blah blah blah blah blah.
 - Blah blah blah blah blah blah:
 - Blah blah blah blah blah blah.
 - Blah blah blah blah blah blah.
 - Blah blah blah blah blah blah.
- Blah blah blah blah blah blah blah blah:
 - Blah blah blah blah blah blah.
 - Blah blah blah blah blah blah.
- Blah blah blah blah blah blah blah blah:
 - Blah blah blah blah blah blah.
 - Blah blah blah blah blah blah:
 - Blah blah blah blah blah blah.
 - Blah blah blah blah blah blah.
 - Blah blah blah blah blah blah.
- Blah blah blah blah blah blah blah blah:
 - Blah blah blah blah blah blah.
 - Blah blah blah blah blah blah.

This is a general to-do.



quote. This is a representative quote."

"This is a representative quote. This is a representative quote."



Primary Tasks

- Blah blah blah blah blah blah
- Blah blah blah blah
- Blah blah blah blah blah blah
- Blah blah blah blah
- Blah blah blah blah blah blah

General

- Platform: Blah blah blah blah blah blah
- Blah blah blah blah blah blah

SuperProduct (at home)

- Blah blah blah blah blah blah
- Blah blah blah blah blah blah
- Blah blah blah blah blah blah

OtherProduct (at work)

- Blah blah blah blah blah blah
- Blah blah blah blah blah blah

Goals

- Blah blah blah blah blah blah blah.
- Blah blah blah blah blah blah blah.
- Blah blah blah blah blah blah blah.

Issues, Challenges, Pain Points

- Blah blah blah blah blah blah blah.
- Blah blah blah blah blah blah blah.
- Blah blah blah blah blah blah blah.
- Blah blah blah blah blah blah blah.
- Blah blah blah blah blah blah blah.