Course   : 0553T / Multimedia System
Year   : 2015

MULTIMEDIA PROJECT
(Planning, Costing, Designing and Producing)
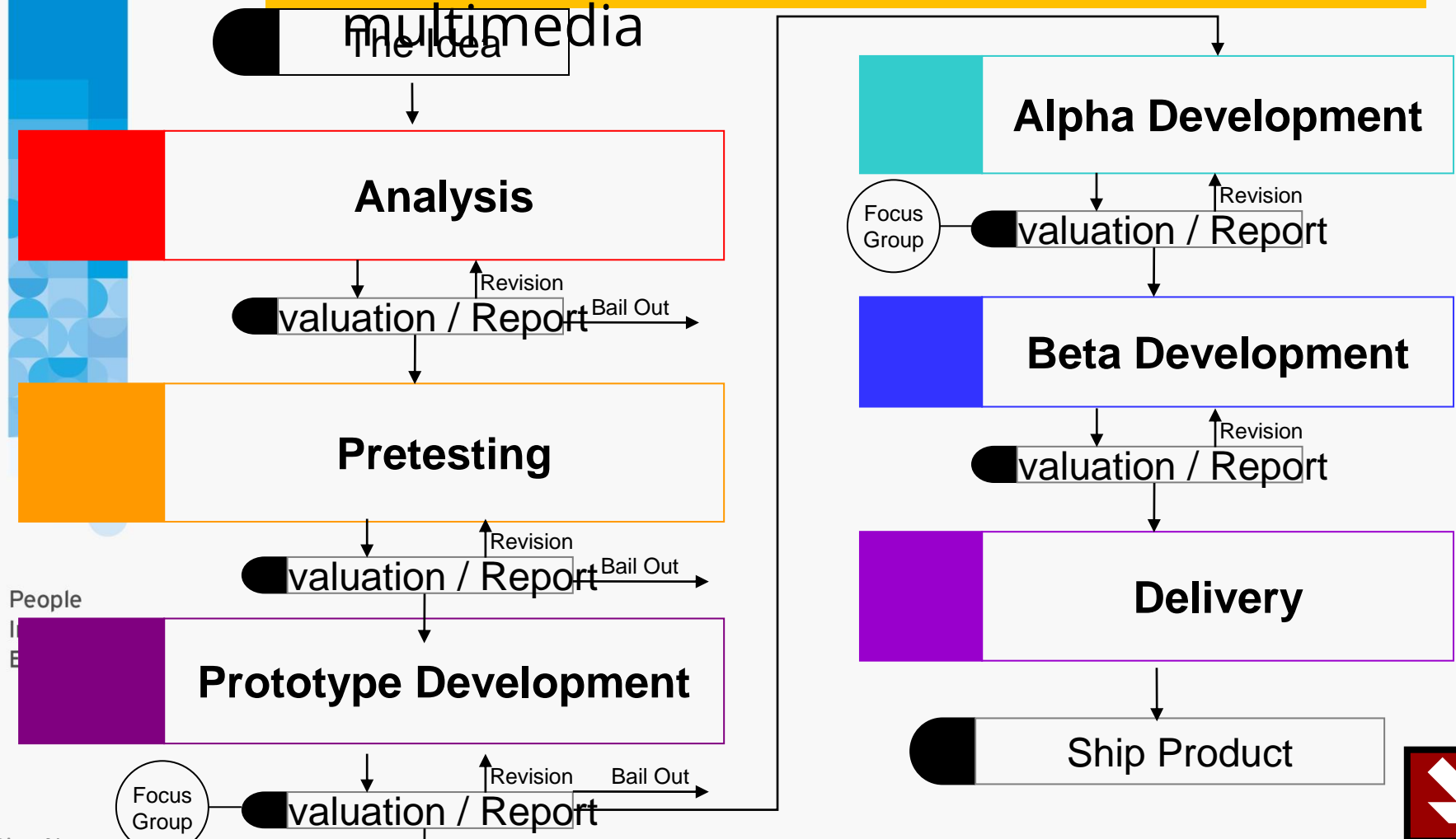# Session 09

OUTLINE

- The Process of Making Multimedia
- Scheduling
- Estimating
- Information Design
- Designing the Structure
- Designing the User Interface
- Producing

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The Process of Making Multimedia

- Before beginning a project, develop a sense of its scope and content.
- Plan for the entire process, beginning with your first idea and ending with completion and delivery of a finished project.
- Project management software can be useful for arranging ideas and tasks, and built-in analysis to help stay within schedule and budget.

The Process of Making Multimedia

The stepwise process of making multimedia

The Idea

Analysis

Evaluation / Report ↑Revision →Bail Out

Pretesting

Evaluation / Report ↑Revision →Bail Out

Prototype Development

Focus Group — Evaluation / Report ↑Revision →Bail Out

Alpha Development

Focus Group — Evaluation / Report ↑Revision

Beta Development

Evaluation / Report ↑Revision

Delivery

Ship Product

The Process of Making Multimedia

- The Idea
  - Use whiteboard, notepaper, and scratch pads as you flesh out the idea
  - Use a note-taking or outlining program on the computer
- The Project Management Software :
  - DotProject
  - Microsoft OneNote
  - Spreadsheet as Excel

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The Process of Making Multimedia

- Analysis

1	**Analyze the Need**

2	**Analyze the Cost**

3	**Analyze the Content**

4	**Analyze the Market**

5	**Analyze the Technology**

6	**Analyze the Delivery Medium**

The Process of Making Multimedia

- Pretesting

1	**Define Project Goal**

2	**Define Skillset needs**

3	**Create Content Outline**

4	**Position Sales & Marketing**

5	**Create Prototype on Paper**

The Process of Making Multimedia

- Prototype Development

1	**Build Screen Mock–Ups**

2	**Design Content Maps**

3	**Design User Interface**

4	**Develop Story/ Messages**

5	**Test Prototype**

The Process of Making Multimedia

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- Alpha Development

1	Detail the Storyboards & Flowcharts

2	Finalize Story Scripts

3	Produce Graphic Art

4	Produce Sound and Video

5	Solve Technical Problems

6	Test Working Prototype

The Process of Making Multimedia

- Beta Development

1	Distribute to Limited Tester List

2	Respond to Bug Reports

3	Prepare User Docs

4	Prepare Packaging

5	Develop Gold Candidates

6	Announce to Press and PR Lists

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The Process of Making Multimedia

- **Delivery**

1	**Prepare Technical Support**

2	**Install Sales Team**

3	**Replicate Gold Master**

4	**Pay Bonuses**

5	**Hold Launch Party**

Scheduling

- After Plan that encompasses the phases, tasks, and work items that will be required to complete the project, then layout these elements along a timeline.

- Usually include milestones at which certain deliverables are to be done.

- To Create the schedule, estimate the total time required for each task and allocate this time among this time among the number of persons that working on the project.

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Scheduling

- Scheduling multimedia project is difficult because of :
  - The making of multimedia is artistic trial and error
  - The technology of computer hardware and software is in constant flux
- In order to protect from a capricious client, need to have points during the project for client sign of on the work. If the client changes his requirement , It would required a change order.

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Estimating

- There are three elements that can vary in project estimates :
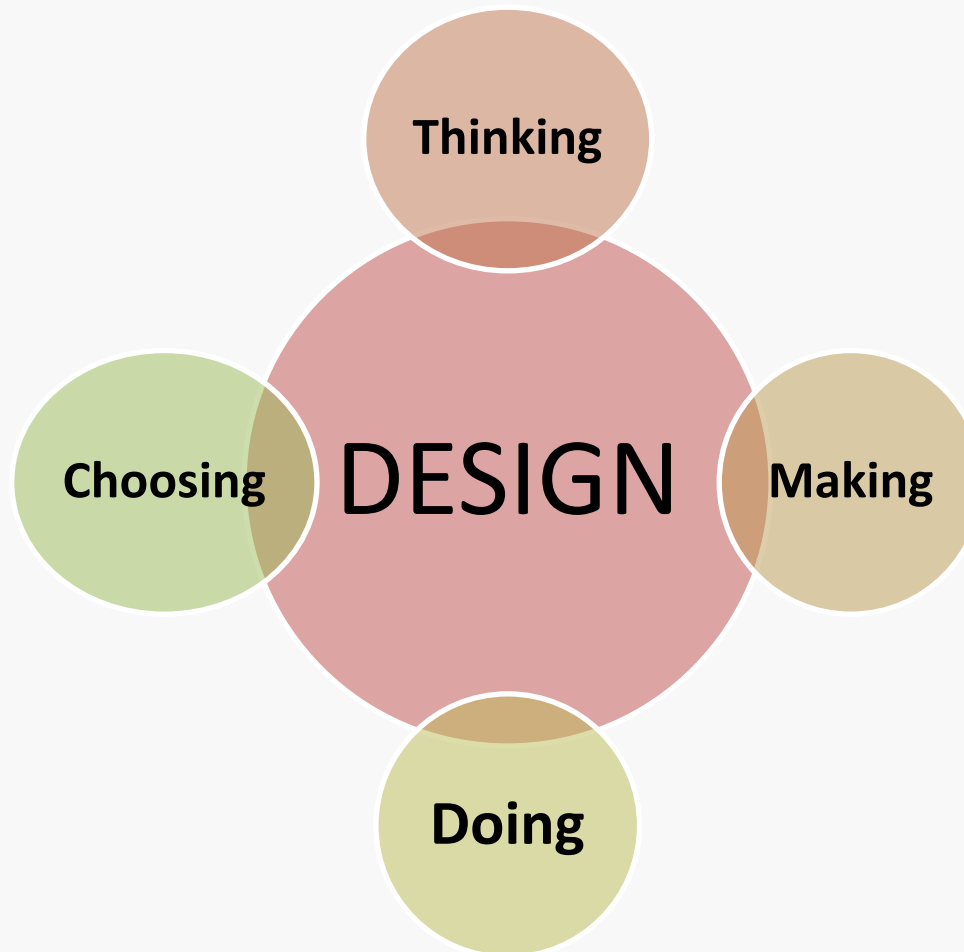 - Time
  - Money
  - People
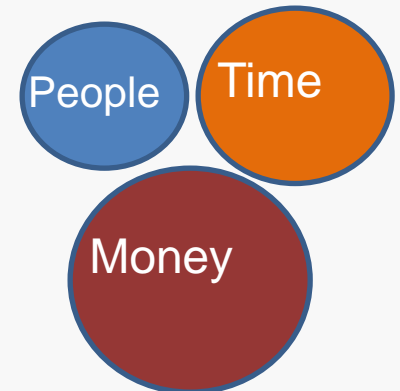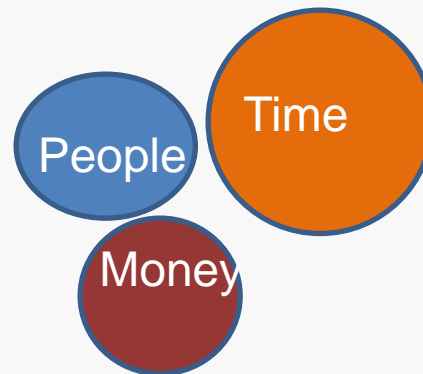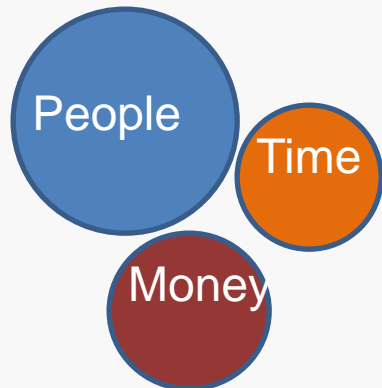
Estimating

- The **billing rate** according to cost of doing business plus a reasonable profit margin.
- RFP (Request for Proposal) are typically detailed documents from large corporations that are "outsourcing" multimedia development work.
- A multimedia bid proposal should include :
  - an executive summary or overview,
  - a section dealing with creative issues,
  - a description how the project's goals will be met
  - A discussion of technical issues

Methodoly for developing software

- Accepted methodology for develop softaware
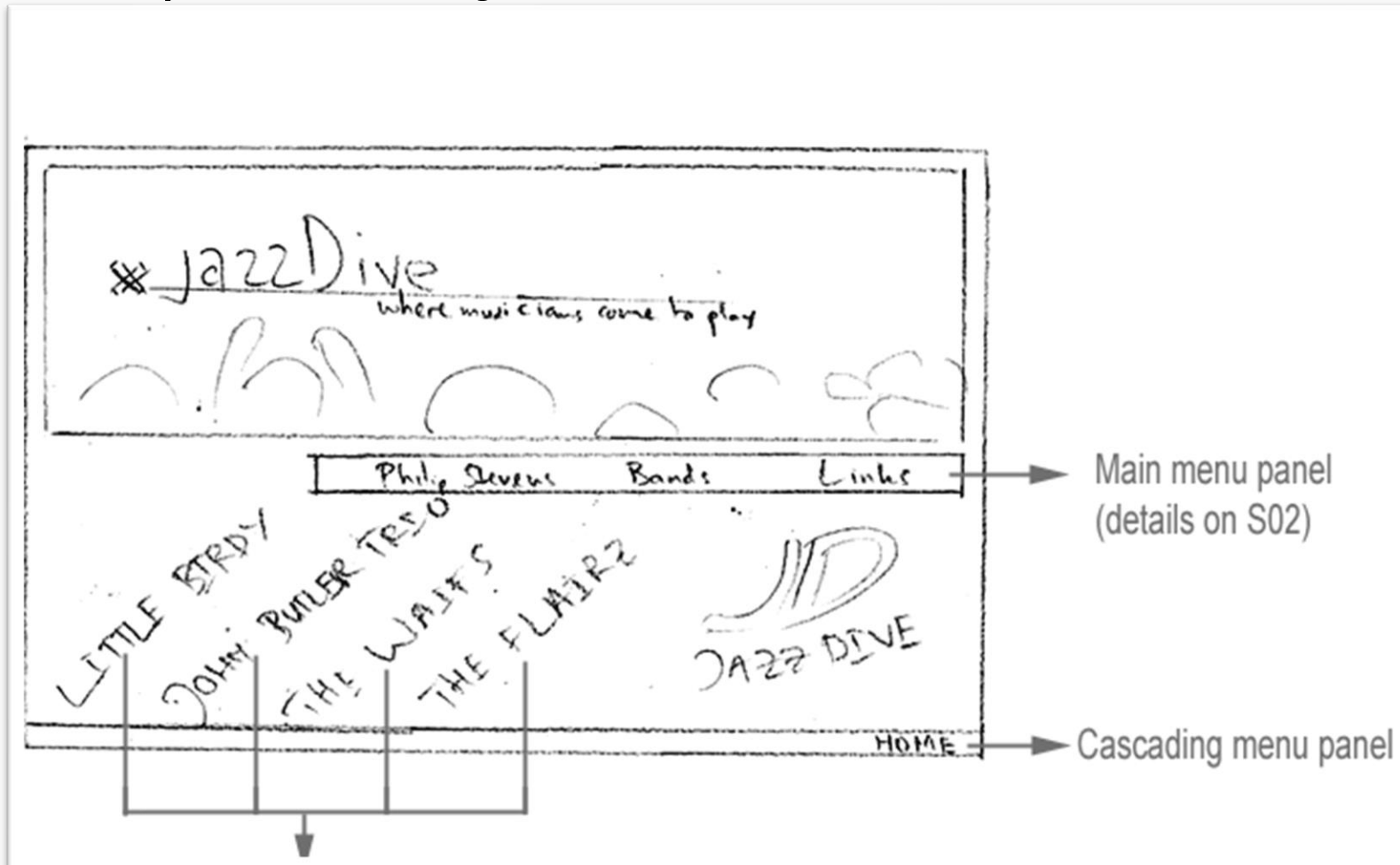 - Waterfall model
  - The Agile Approach

Information Design

Information Design

- There are two approaches to creating an original interactive multimedia design :
  - Storyboards :
    - describing the project in exact detail
    - using words and sketches for each and every screen image, sound and navigational choice, right down to specific colors and shades, text content , attributes, and fonts , button shapes, styles, responses, and voice inflections. Sometimes called wireframing.

Information Design

- Example of Storyboard

※ JazzDive
where musicians come to play

Phil Stevens   Bands   Links   → Main menu panel (details on S02)

LITTLE BIRDY
JOHN BUTLER TRIO
THE WAITS
THE FLAIRZ
JAZZ DIVE

HOME → Cascading menu panel

- Example Card base story board

Information Design

Textual Storyboard : S02 Detail

- Logo Banner :
  - Band nameT ypeface : Impact, 12 pt, white
  - Band slogan Typeface : Impact, 8 pt, white

- Main Menu Panel :
  - Typeface : Arial , 12 pt, black
  - Background color : gold
  - Mouse hover → font : white, background color : white
  - Mouse click → font : white, background color : gold

- Music : jazz01.wav

- Example wireframing software

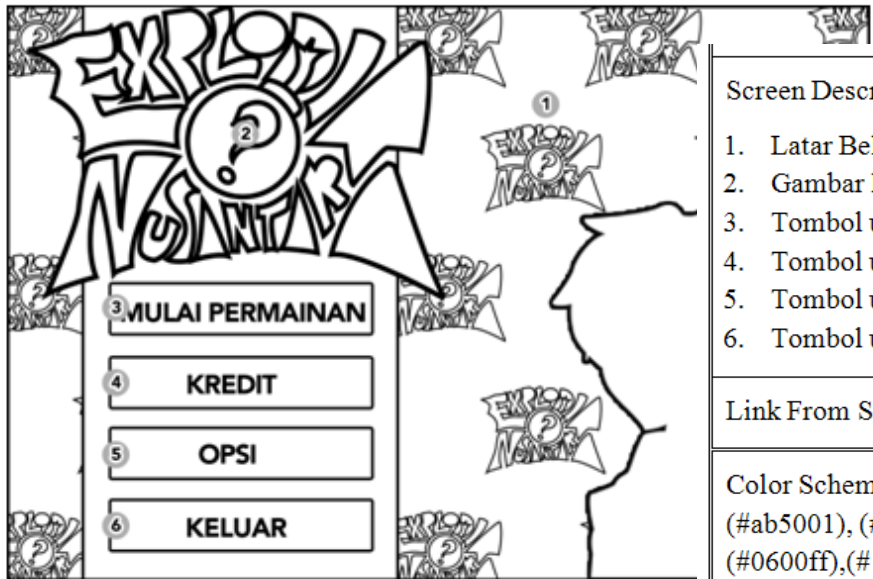|	
UXPin	Penultimate
Fluid UI	Pencil Project
Balsamiq Mockups	OmniGraffle
Axure	Gliffy
Pidoco	Mockflow
Visio	Framebox
InDesign CC	FlairBuilder
Protoshare	Justinmind
Photoshop CC	HotGloo
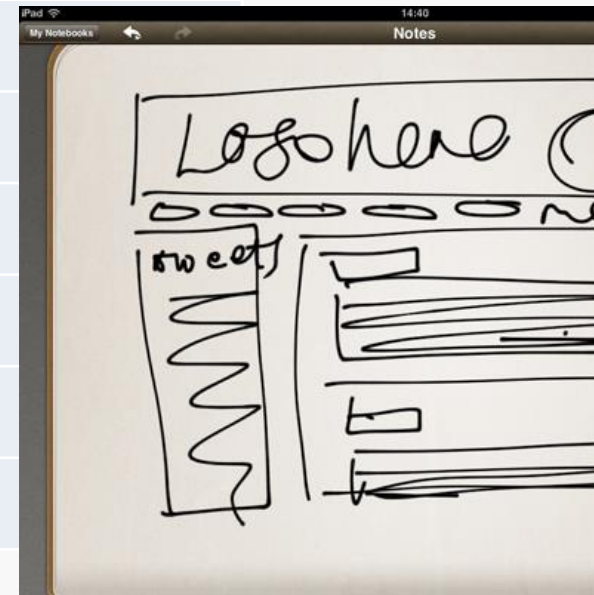
Information Design

- The Output :

Information Design

Example of Storyboard

Screen Description:

1. Latar Belakang untuk halaman menu awal.
2. Gambar logo game 'Explodia Nusantara'.
3. Tombol untuk menuju ke halaman pilih profil (screen ID : 02)
4. Tombol untuk menuju ke halaman kredit (screen ID : 18)
5. Tombol untuk menuju ke halaman opsi (screen ID : 21)
6. Tombol untuk keluar dari permainan.

Link From Screen ID: 02,18,21	Link to Screen ID: 02,18,21

Color Scheme: Putih (#ffffff), Hitam (#000000),(#0e0e0e), (#222222) ,Coklat (#ab5001), (#c57520),(# af6f01) , Krem (#f8d297) ,Kuning (#ffe508) ,Biru (#0600ff),(# 5e5dff), (#0201a4) , Merah (#ff0000)

Text Attributes: Avenir LT Black Font size 25pt

Still Images: BG menu awal.jpg, BG button.png, hero-menu awal.png, logo.png.
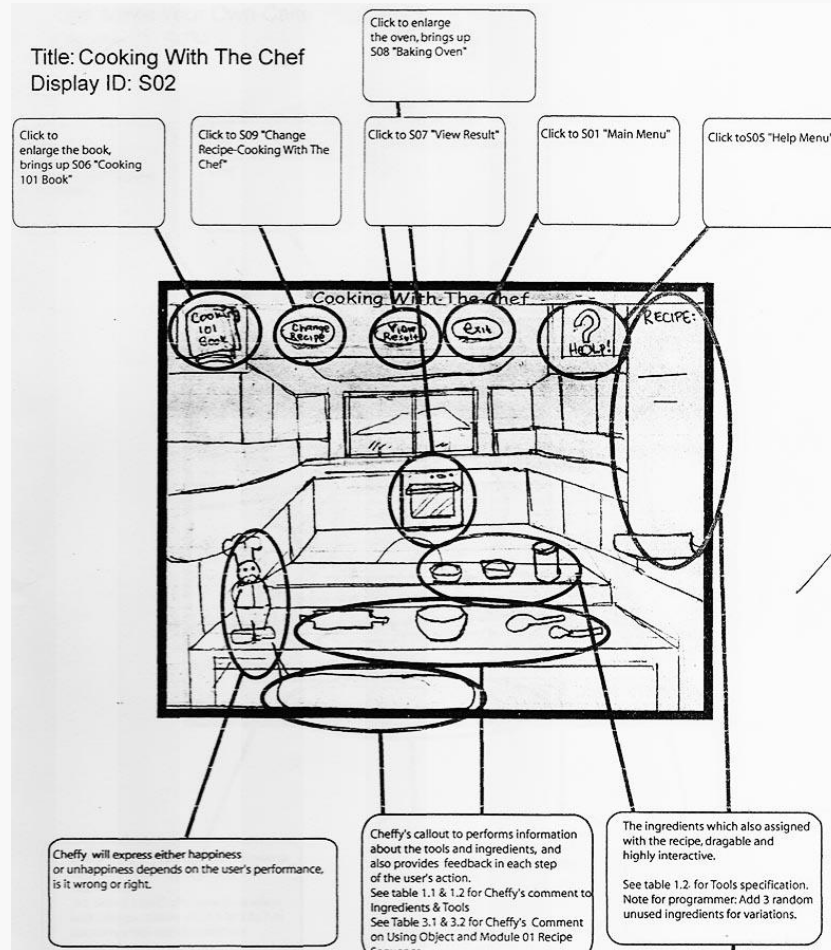
Audio: startgame.midi(repeat forever)

Video:

Information Design

- Output :

Information Design

Title: Cooking With The Chef
Display ID: S02

Click to enlarge the book, brings up S06 "Cooking 101 Book"

Click to S09 "Change Recipe-Cooking With The Chef"

Click to enlarge the oven, brings up S08 "Baking Oven"

Click to S07 "View Result"

Click to S01 "Main Menu"

Click to S05 "Help Menu"

Storyboard (Visual)

Cheffy will express either happiness or unhappiness depends on the user's performance, is it wrong or right.

Cheffy's callout to performs information about the tools and ingredients, and also provides feedback in each step of the user's action.
See table 1.1 & 1.2 for Cheffy's comment to Ingredients & Tools
See Table 3.1 & 3.2 for Cheffy's Comment on Using Object and Module 01 Recipe Sequence

The ingredients which also assigned with the recipe, dragable and highly interactive.
See table 1.2 for Tools specification.
Note for programmer: Add 3 random unused ingredients for variations.

Storyboard (Textual)

Display ID : S02

Cheffy's Opening Message (Visual and audio) :

"Welcome new apprentice! Let's make the cake together. Follow my instructions and I guarantee you will have a super-delicious cake. Cheffy is the best!"

Background music : fun and exciting music

Interactivity :

In this module, user can drag and drop the tools and ingredients. Cheffy will give instruction step by step (see table 3.1 for details). For each user's action, correct or not, Cheffy will comment on it (see table 3.2 for details). If user does correctly as requested, Cheffy will look happy then issue the next instruction if not he will frown and issue the same instruction until user gets it right. If user finished the current recipe, the recipe's score in "View Result" screen will change into 'Completed' and the next time user enters the module, it will be replaced by next recipe in the sequence. The first recipe will be Apple Spice Cake. The recipe order is as in the table 3.1 below.

Information Design

- Output :

Information Design

- Storyboards (continue) :
    - Wireframing :
        - This method well suited for teams that can build prototypes quickly and rapidly convert into finished goods.
- The other approach is use less-detailed storyboards as a rough schematic guide
    - Allowing to exert less design sweat up front and expend more effort actually rendering the product at a workstation.

Designing the Structure

- Navigation
  - Navigation map outline the connections or links among various areas of the content and to organize content and message.
- Fundamental organizing structures used in multimedia project , often in combination :
  - Linear
  - Hierarchical
  - NonLinear
  - Composite

Designing the Structure

- Four Primary navigational structures used in Multimedia :

Linear

Hierarchical

Nonlinear

Composite
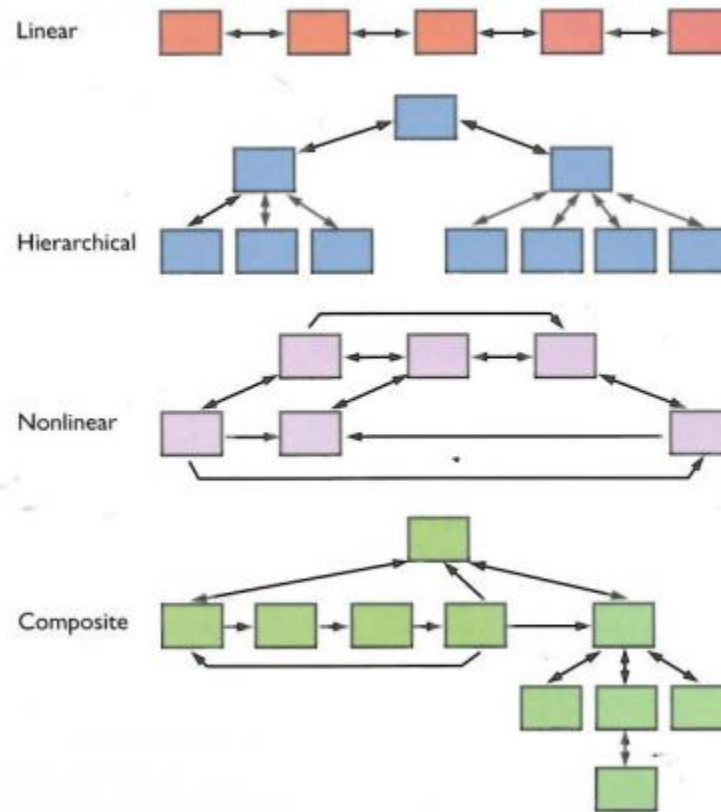
Designing the Structure

- Professor Judith Junger suggest when design multimedia product , should work with two types of structure :

  - Depth Structure

    - Represents the complete navigation map and describes all the links between all the component of project

  - Surface Structure

    - Represents the structures actually realized by a user while navigating the depth structure.
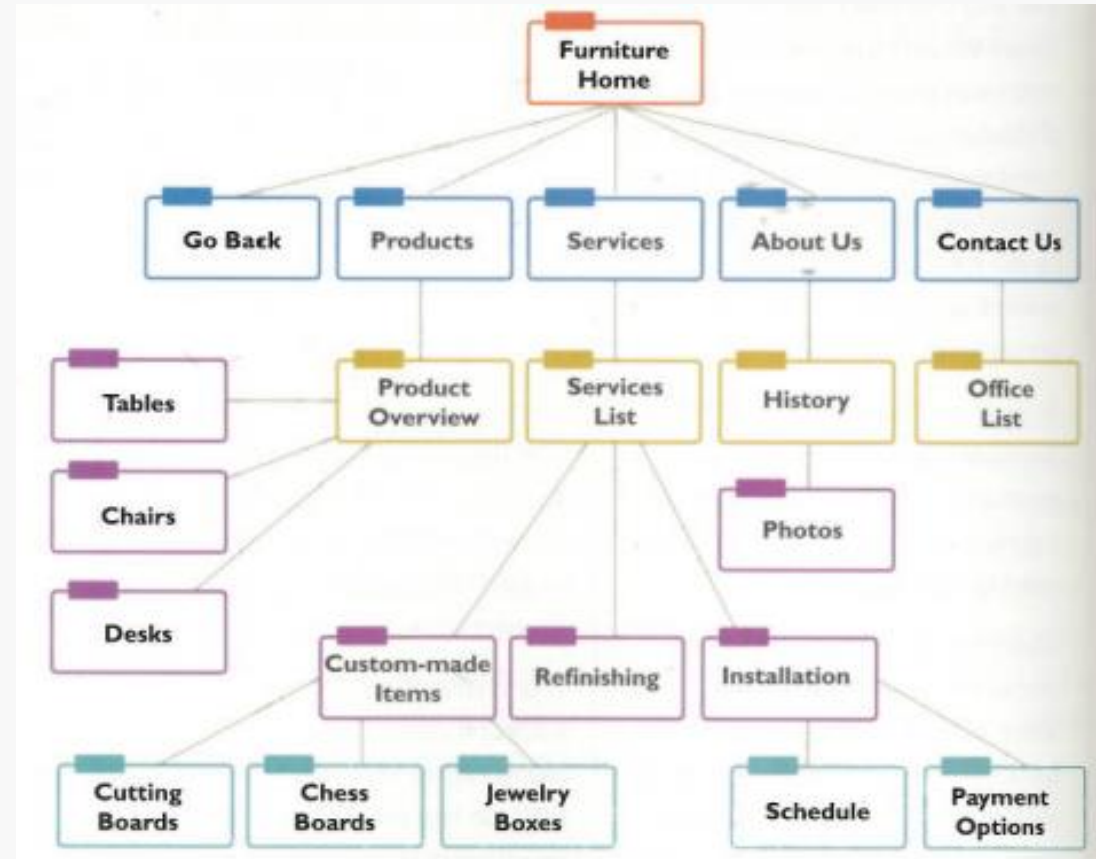
- Example the following Depth Structure
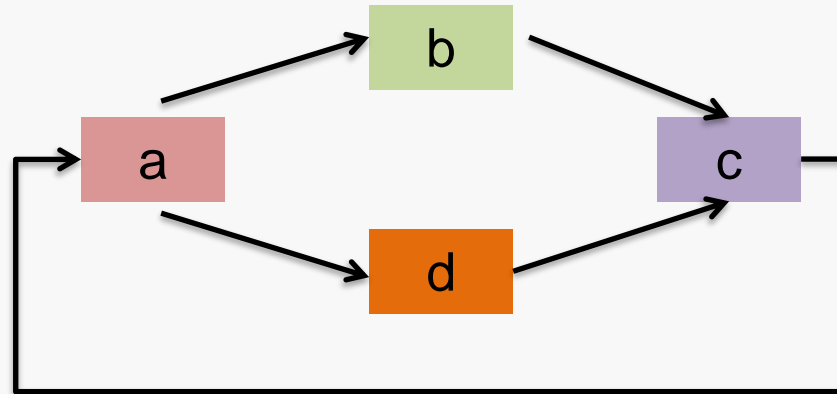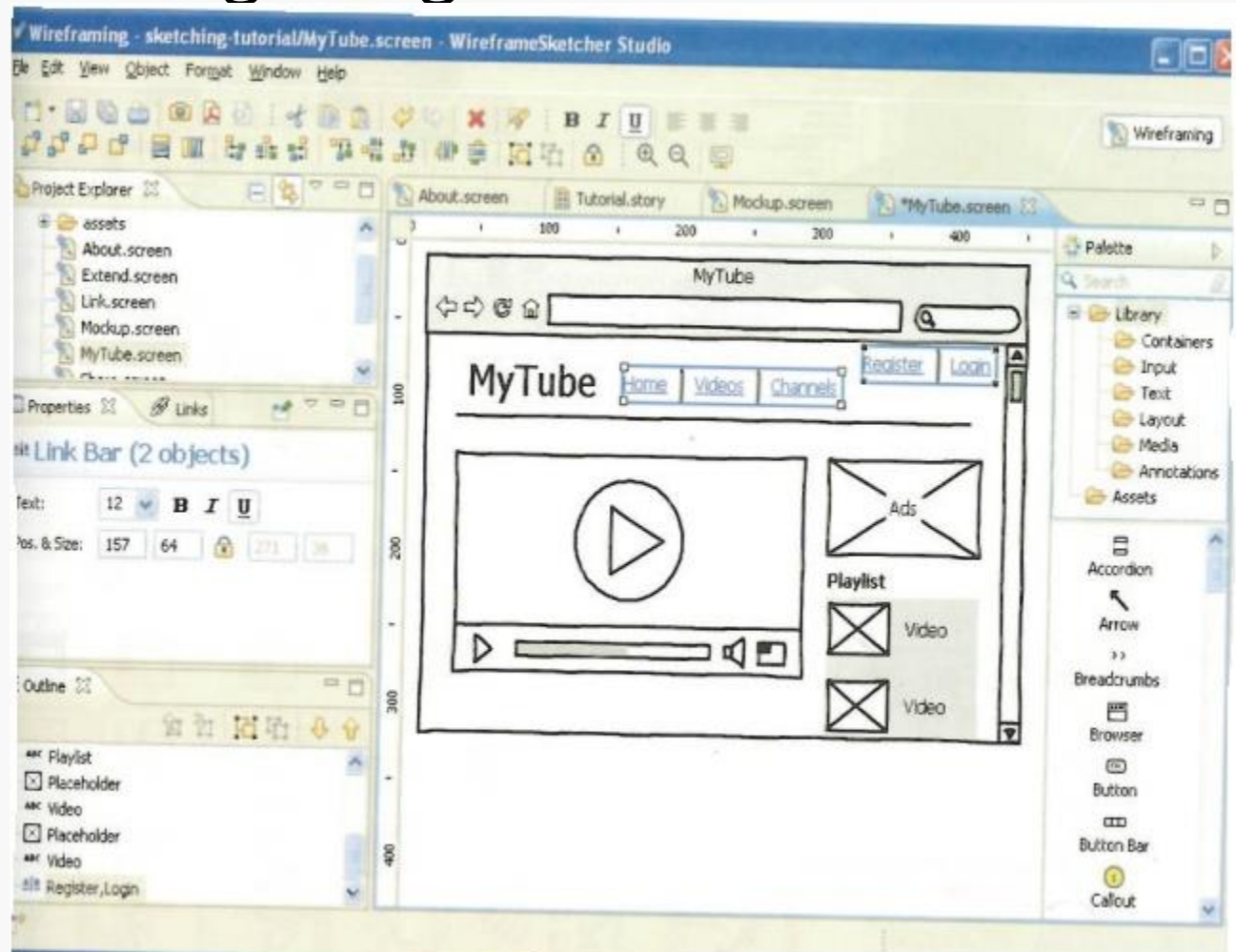

- Might be realized as the following Surface Structure :
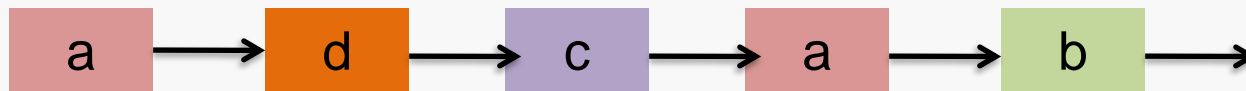
Designing the Structure

- An example of Navigation Map

Designing the Structure

• Wireframing using WireframeSketcher

Designing the Structure

- PowerMapper provides many ways to display and organize content through visual navigation maps (www.powermapper.com)

Skyscrapers

PageCloud

Designing the Structure

- www.PowerMapper.com (continue)

ThumbTree

Electrum

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Designing the Structure

- Hot Spots, Hyperlinks, and Buttons
  - Most multimedia authoring systems allow to make any part of the screen or any object into a Hot Spot.
  - Hot Spots can be given more specific names based upon either their function or their form.
  - If clicking the hot spot connects the user to another part of the document or program or to different program or web site, it is referred to as a link , hyperlink or anchor.

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Designing the Structure

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Designing The Structure

- Button -> If the Hot Spot is a graphic image designed to look like a push button or toggle switch

- Hot Spots can be text or graphic images, and icon.

- Icon : graphic objects designed specially to be meaningful as buttons and are usually small.

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Example of Icon
source :

Designing the User Interface

- The User Interface of multimedia product :
  - A blend of its graphic elements and its navigation system.
- There are two types of end users :
  - Those who are computer literate (Expert)
  - Thos who are not (Novice)
- Modal Interface :
  - The simplest solution for handling varied levels of user expertise
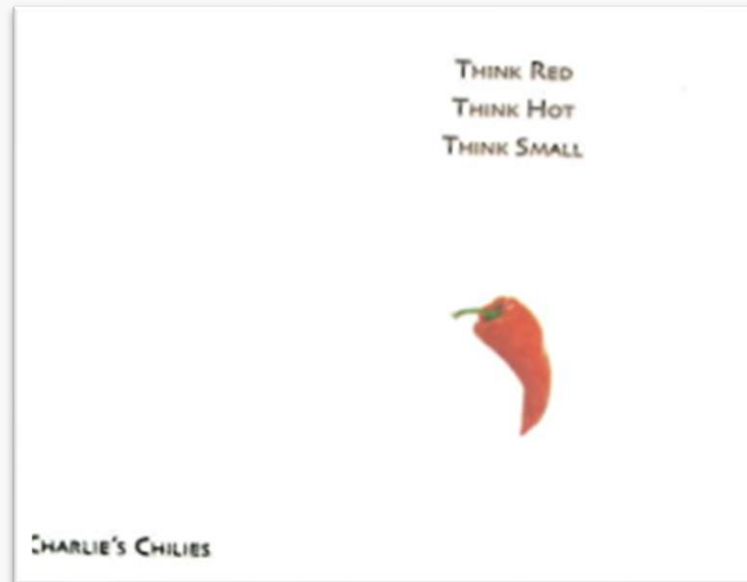
Designing the User Interface

- Some graphical approaches that get good results :

  – Neatly executed contrasts : big/small, heavy/light, bright/dark, thin/thick, cheap/dear

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- Some graphical approaches that get good results (continue) :
  - Simple and clean screens with lots of white space

THINK RED
THINK HOT
THINK SMALL

CHARLIE'S CHILIES

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Designing the User Interface

- Some graphical approaches that get good results (continue) :
  - Eye-grabbers such as drop caps, or a single brightly colored object alone on a gray-scale screen
  - Shadows and drop shadows in various shades
  - Gradients
  - Reversed graphics to emphasize important text or images
  - Shaded objects and text in 2-D and 3-D

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- Things to avoid in creating computer graphics :

  - Clashes of color
  - Busy screens (too much stuff)
  - Using a picture with a lot of constrast
  - Trite humor in oft-repeated animations
  - Clanging bells or squeaks when a button is clicked
  - Frilly pattern borders

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- Things to avoid in creating computer graphics (Continue) :
  - Cute one-liners from famous movies
  - Requiring more than two button clicks to quit
  - Too many numbers (limit chars to about 25 numbers)
  - Too many words
  - Too many substantive element presented too quickly

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Producing

- Production
  - The phase when multimedia project us actually rendered.
- Starting Up
  - Check development hardware and software
  - Review organizational and administrative setup

Producing

- Working with clients
  - If making multimedia for clients is a special case
    - Be sure organization of your project incorporates a system for <u>good communication with the client</u>
    - Develop a scheme that specifies the number and duration of client approval cycles
    - Provide mechanism for change orders when changes are requested after sign-off.

Producing

- Data storage media and transportation
  - Define kind of method of transporting the file of project . Example : provide web or FTP. Or use the Internet to deliver the multimedia product to the client.
- Tracking
  - Develop a file-naming convention specific to the project's structure.
  - Version control of the files (tracking editing changes) is critically important too especially for large project.

Producing

- Copyrights
  - Used authoring platform to the software programming code or script that drives a particular project.

Supporting Materials

- http://www.ceismc.gatech.edu/MM_Tools/
- http://www.mindtools.com/pages/article/newPPM_03.htm
- http://www.aliceprogramming.net/text/chapt2_Design.pdf
- http://www.ligaturesoft.com/multimedia/multimedia-development-process.html
- http://www.jobguide.thegoodguides.com.au/text/jobdetails.cfm?jobid=287
- http://www.phillipkerman.com/newmedia98/nm98_226.pdf
- https://balsamiq.com/
- http://webdesign.about.com/od/webdesignbasics/g/wireframe-definition.htm

Exercise

- There are some steps in analysis's stage. Explain them briefly !
- Discuss the different between alpha development and beta development !
- There are four fundamental organizing structures used in multimedia projects. Explain them briefly!
- Design the storyboard for education game application for children!

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