

PROYEK MULTIMEDIA (THE MAKING OF)



Definisi Multimedia (review)

Multimedia merupakan kombinasi teks, suara, grafik, gambar, video, animasi dan karya seni yang disampaikan dengan komputer dan dapat dimanipulasi secara digital serta dapat dikendalikan secara interaktif (Vaughan, 2004).

PROYEK MULTIMEDIA



“Pengalaman menyatakan bahwa kebanyakan proyek MM yang gagal, lebih dikarenakan manajemen proyek yang tidak memadai daripada karena masalah teknologi”

(Brown, 1991 discussing Project Management for MM Development)

The Importance of Planning

- Concept
- Script
- Storyboard
- The Timeline
- Model Sheets and Character Design
- Backgrounds
- Soundtrack

The Importance of Planning

- *Concept*

- Animations begin with the Concept, the idea behind the film.



The Importance of Planning

- *Script*

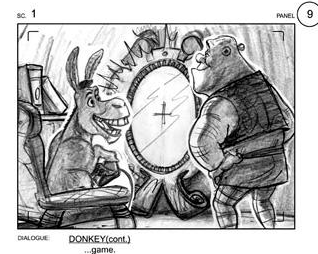
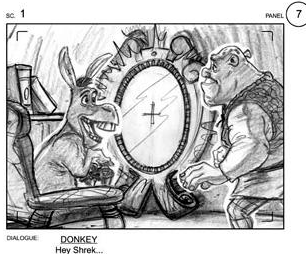
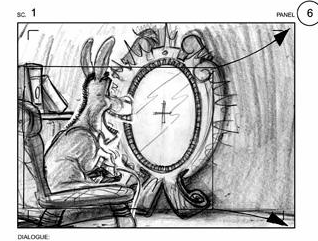
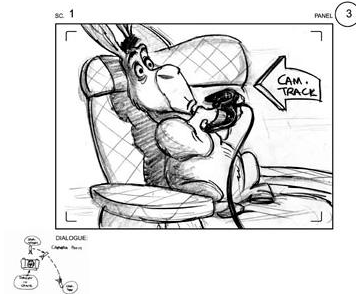
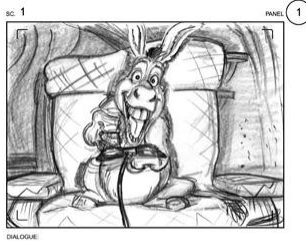
- Once a good concept is settled on, it is then developed into a Script or treatment,
- the script is used to tell a story to the audience.

- A good script will be one that boils the story down to its essentials and manages to keep the interest of the audience every step of the way.

- While it is written, the treatment forms the foundation for the next step – the artist's visualization of the film.

The Importance of Planning

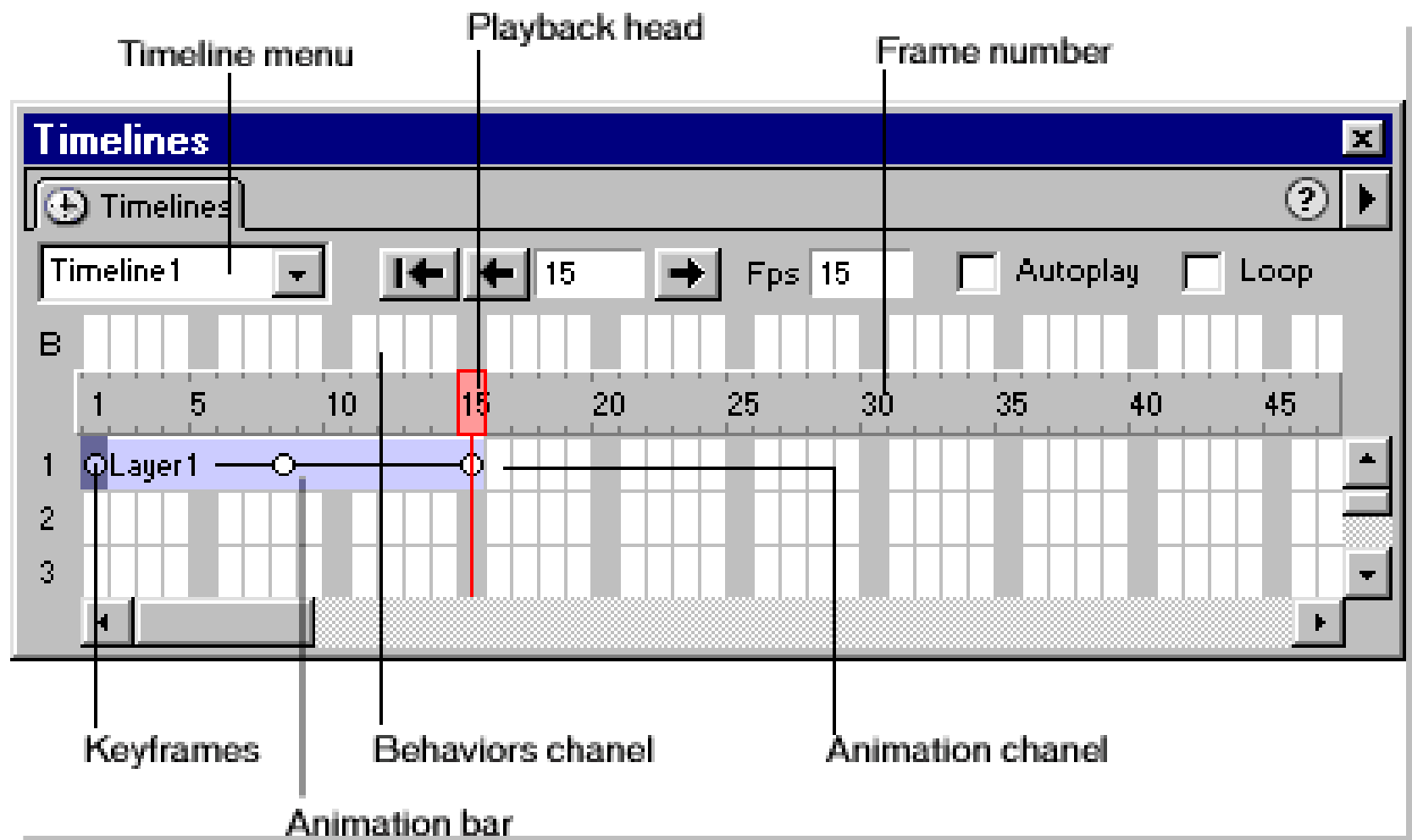
- Storyboard



The Importance of Planning

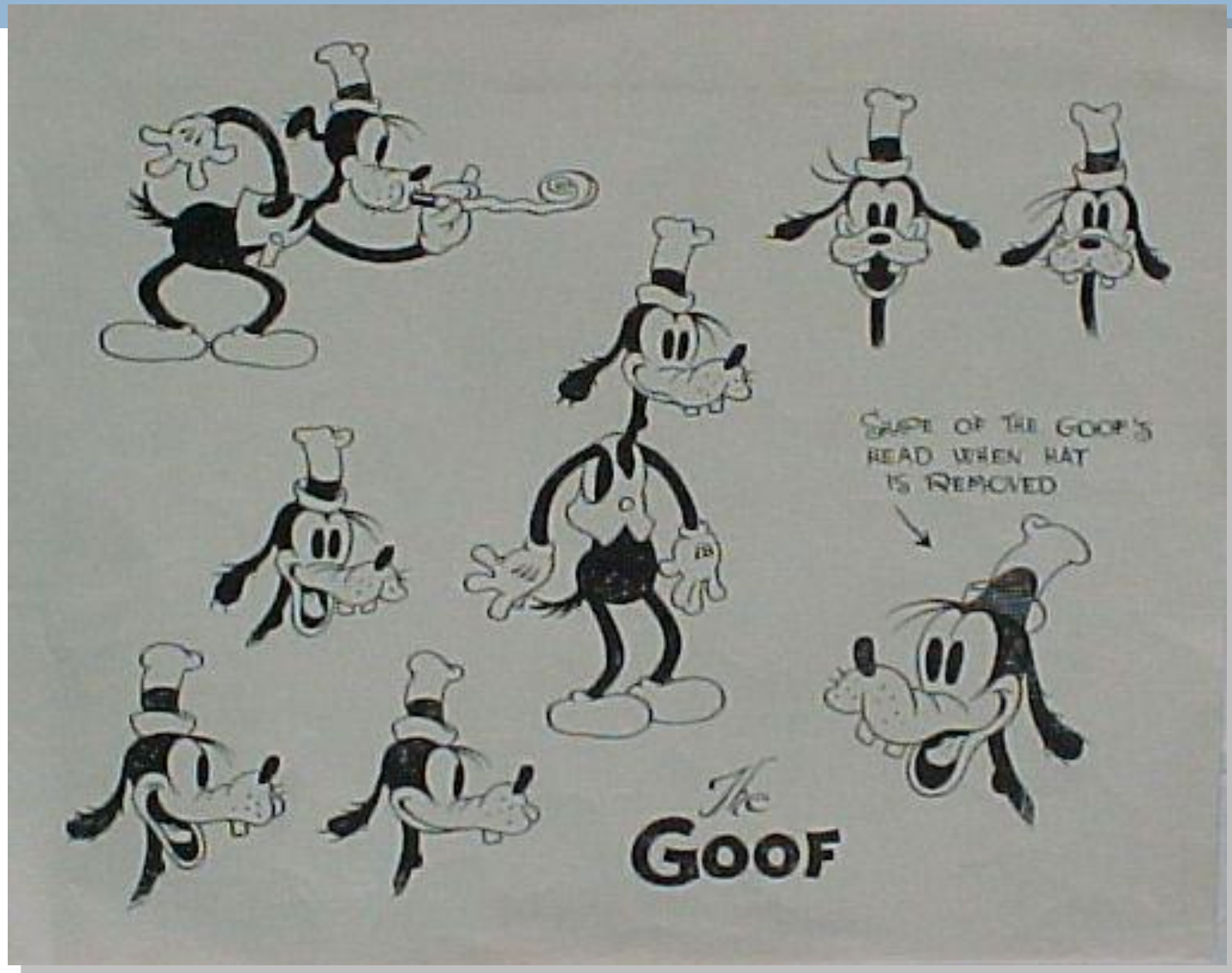
- The Timeline

- The timeline is the backbone of all animation software.



The Importance of Planning

- *Model Sheets and Character Design*



The Importance of Planning

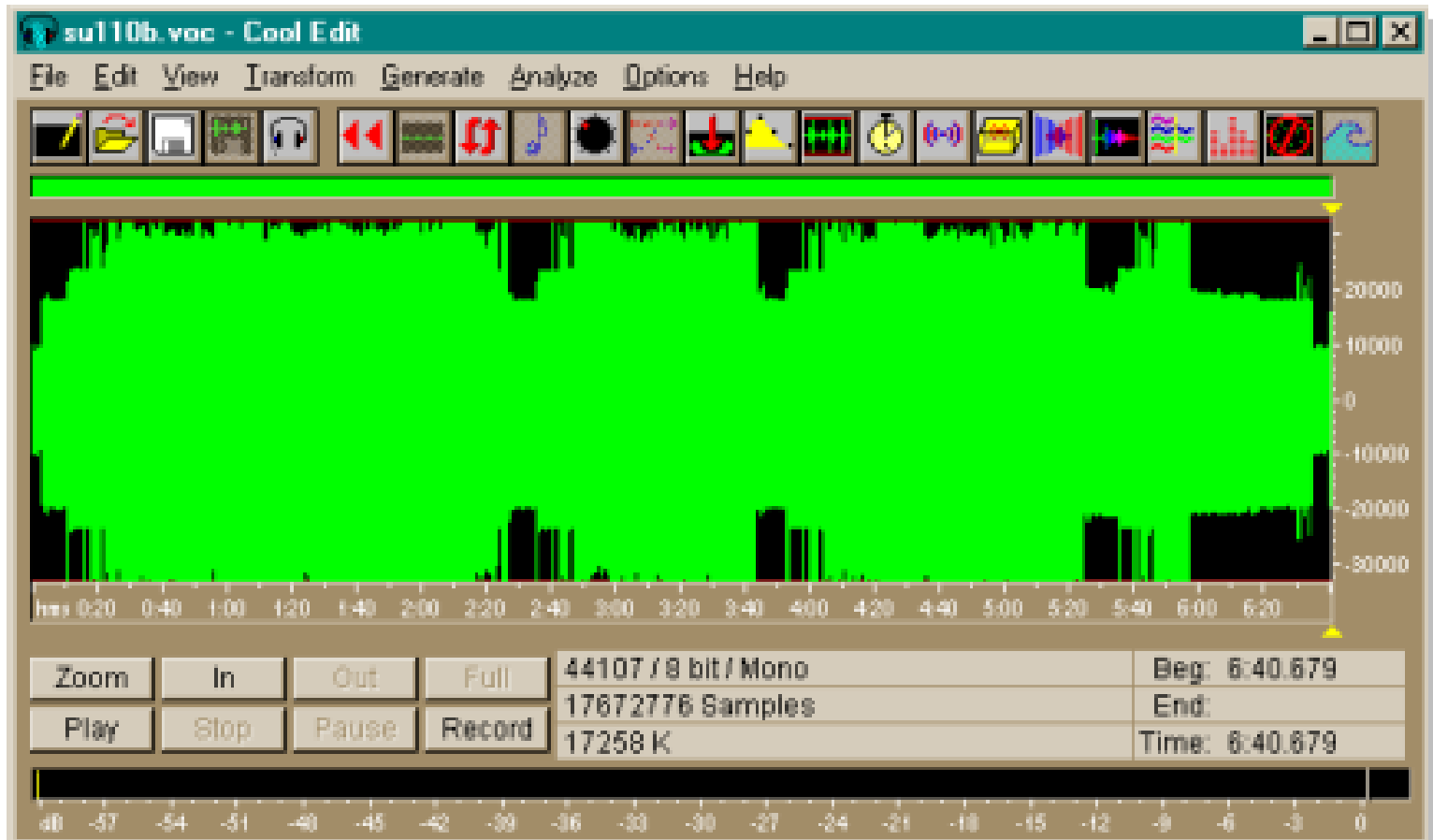
- Backgrounds

- In the larger studios, while the main actions are being animated, other artists are at work creating backgrounds for the film.
- They provide a stage for the characters and help set the mood of each scene.
- Because they are seen by viewers for longer periods of time than any one image of a character, they are generally more complex and developed than the character drawings.

The Importance of Planning

- Soundtrack

- The Soundtrack plays an important supporting role in an animated film.





Hal-hal yang harus diperhatikan dalam pengembangan aplikasi multimedia

Hal-hal yang harus diperhatikan dalam pengembangan aplikasi multimedia :

a. Siapa **target audience** ?

- ▣ Umur & tingkat pendidikan
- ▣ Gaya / cara belajar
- ▣ Kebutuhan dan harapan pemakai
- ▣ Etnik, Gender, komposisi budaya

b. Apa **tujuan program** aplikasi MM?

- ▣ Berupa presentasi / tutorial / interactive page ?
- ▣ Dipakai oleh group / single user ?
- ▣ Dipakai di TV / komputer / kiosk ?

Hal-hal yang harus diperhatikan dalam pengembangan aplikasi multimedia :

c. Apa **struktur / isi program** aplikasi MM?

- ▣ - Isi program dapat berupa pesan khusus, data, gambar, grafik,, video, atau informasi lain
- ▣ - Isi program dirancang oleh content specialist untuk diberikan kepada multimedia architect

d. **Komponen-komponen** apa saja yang akan dipakai ?

- ▣ - Gunakan berbagai macam media seperti narasi, gambar, animasi, video, teks, dll untuk menarik pemakai sehingga dapat menangkap informasi yang disampaikan
- ▣ - Untuk pemakai individu/kelompok?

e. **Tingkat interaksi** yang diharapkan antara user dan komputer



Apa saja yang diperlukan?

Apa yang Diperlukan?

- Perangkat keras
 - ▣ Sistem komputer
 - ▣ Perangkat penampil hasil MM
 - ▣ Perangkat capture
 - ▣ Perangkat penyimpanan
 - ▣ Jaringan komunikasi
- Perangkat Lunak
 - ▣ Sistem operasi
 - ▣ Editing
- Kreativitas
- Organisasi

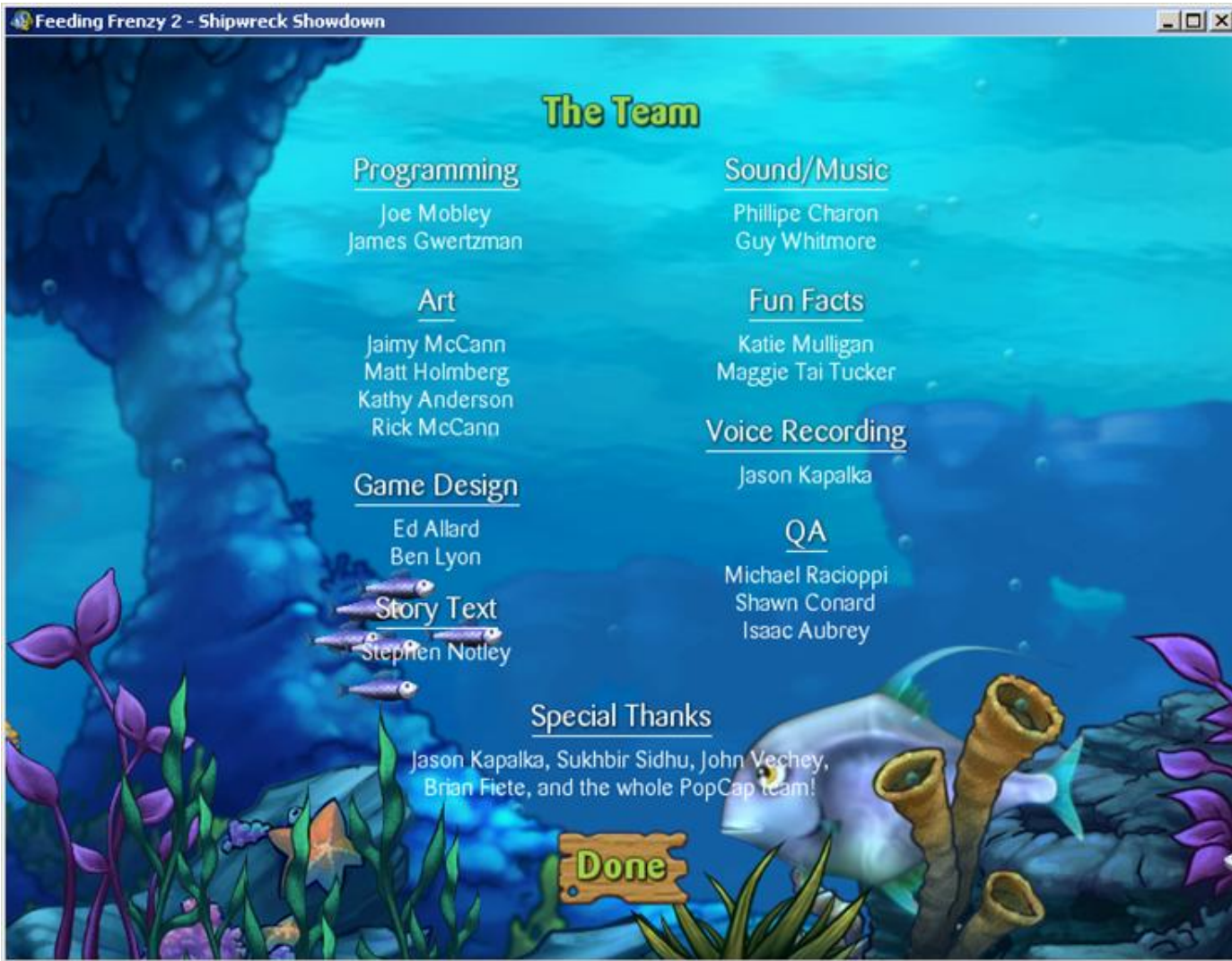
Kreativitas

- Aset paling berharga. yang harus dibawa ke dalam proyek multimedia
- Dalam sebuah proyek multimedia, menjadi kreatif berarti tahu tentang hardware dan software serta seni
- Sangat sulit untuk mempelajari kreativitas namun tidak mungkin akan merasa bosan saat mempelajarinya. Seperti seniman tradisional, semakin baik mengenal media, semakin mungkin dapat mengekspresikan kreativitas.

Organisasi

- Sangat penting untuk membuat garis besar yang terorganisasi dan rencana yang rasional untuk merinci keterampilan, waktu, biaya, peranti, dan sumber daya yang diperlukan dalam suatu proyek.
- Harus ditetapkan sebelum memulai proyek MM untuk menentukan: siapa melakukan apa, sampai batas waktu kapan, bagaimana prosesnya dan di mana.
- → Keahlian Multimedia

Credit Title





Delicious version 1.0
Copyright (c) 2005-2006 Zylom

- Game Design -
Jakko van Hunen
- Game Development -
Bas van den Berg & Jason Steel
- Design -
Chantal Goddery
- Project Support -
Mark van Kuijk
- Music and SFX -
Maniacs of Noise
- QA -
Koen Geluk & Willem Sijbers
- Localization -
Wouter van den Borne
- Technical Support -
Jean-Paul Hamerton

Thanks to all our beta testers and everybody at Zylom

OK

Settings

High scores

Help

Quit



Keahlian Multimedia

- Untuk membuat multimedia yang bagus, perlu bermacam-macam keterampilan yang mendetail mengenai komputer, teks, seni grafis, suara, dan video → **skill set multimedia**, dapat dari satu individu atau dari sekumpulan yang bekerja sebagai tim.
- Proyek multimedia yang kompleks didukung oleh tim. seniman komputer, dimana tugas-tugas didelegasikan kepada orang yang paling ahli dalam disiplin ilmu dan pekerjaan tertentu.
- Jenis pekerjaan dan peran dari kolaborasi tim, dalam multimedia diadaptasi dari gabungan antara lain: industri film, penyiaran radio dan televisi, serta industri perangkat lunak komputer.

Keahlian Multimedia (Skill Set)

- Project Manager
- Multimedia Designer
- Interface Designer
- Writer
- Video Specialist
- Audio Specialist
- Multimedia Programmer
- Web Producer

□ **Manajer Proyek**

Seorang manajer bertanggung jawab untuk pengembangan keseluruhan dan pelaksanaan proyek serta untuk operasi sehari-hari proyek

Manajer Proyek memegang anggaran, jadwal, sesi kreatif, lembar waktu, penyakit, faktor dan dinamika tim bersama-sama

□ **Multimedia Designer**

Multimedia desainer melihat isi keseluruhan proyek, menciptakan struktur untuk konten, menentukan elemen desain yang diperlukan untuk mendukung struktur dan yang memutuskan media yang sesuai untuk menyajikan konten

Pada intinya, perancang multimedia menyiapkan cetak biru untuk keseluruhan proyek: konten, media dan interaksi

□ **Desainer Antarmuka**

Desainer antarmuka bertanggung jawab untuk menciptakan kesederhanaan yang elegan dari tampilan multimedia, kemudahan bagi pengguna dapat berpindah dalam suatu window, penggunaan yang efektif dari frame, latar belakang, ikon dan panel kontrol

□ **Penulis**

Seorang penulis menulis proposal multimedia, narasi aktor, teks pada pesan dan mengembangkan karakter yang dirancang untuk lingkungan yang interaktif

□ **Video Spesialis**

Seorang spesialis video perlu memahami cara mengambil gambar berkualitas, bagaimana untuk mentransfer rekaman video ke komputer, bagaimana untuk mengedit rekaman sampai ke produk akhir dengan menggunakan sistem editing digital dan bagaimana mempersiapkan file video untuk pengiriman yang paling efisien pada CD, DVD atau Web.

□ **Audio Spesialis**

Spesialis Audio adalah penyihir yang membuat program multimedia hidup dengan merancang dan memproduksi musik, suara narasi dan efek suara

Audio spesialis bertanggung jawab untuk mencari dan memilih musik yang sesuai.

□ **Multimedia Programmer**

Seorang programmer multimedia mengintegrasikan semua elemen proyek multimedia secara keseluruhan menggunakan sistem authoring atau bahasa pemrograman

□ **Website Producer**

Sebuah tanggung jawab produser website ini untuk membuat satu set halaman untuk World Wide Web yang terkoordinasi

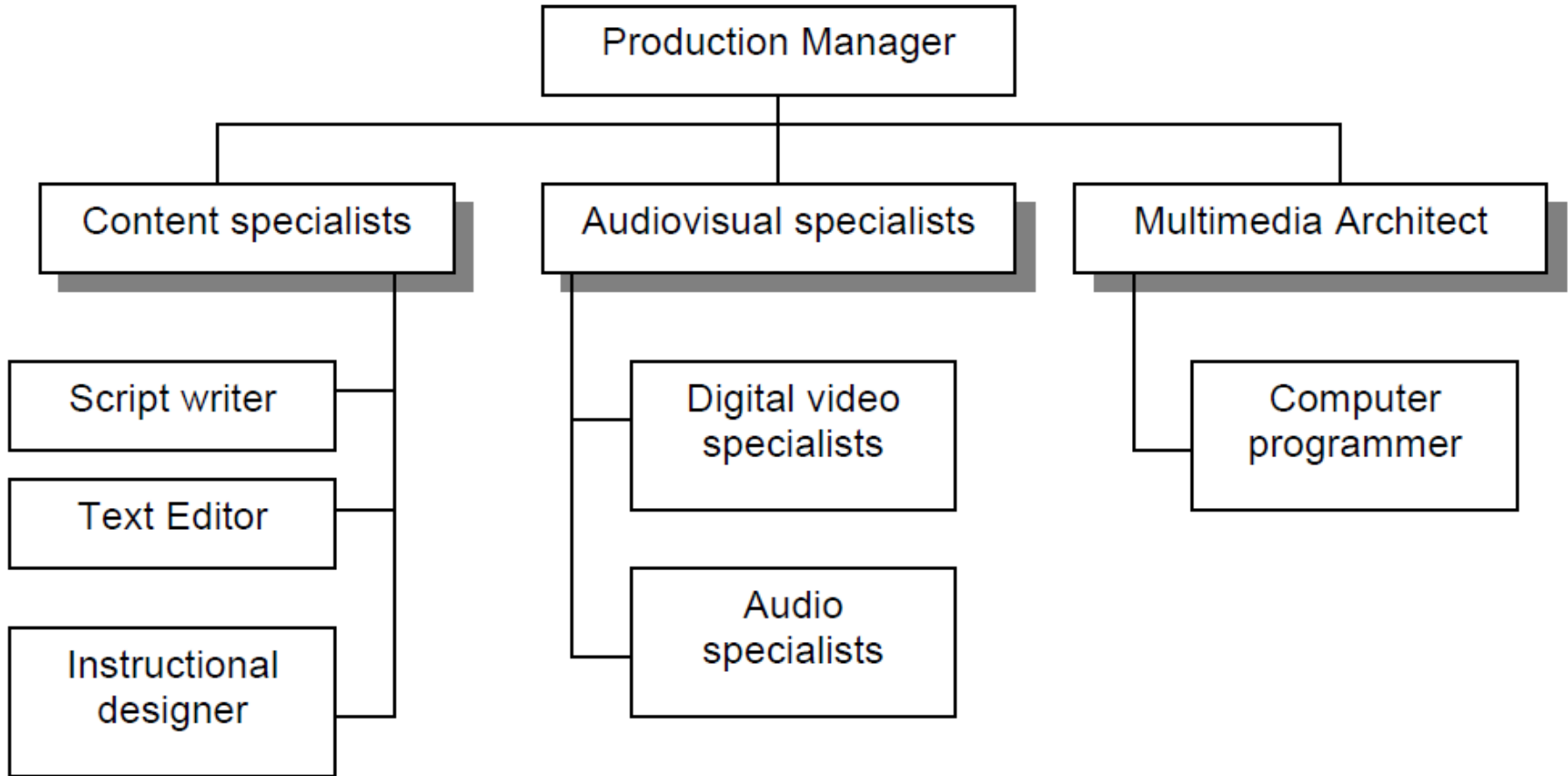


Organisasi multimedia

Organisasi Multimedia (Wes Baker)


1. Produser eksekutif
2. Manajer proyek
3. Direktur kreatif
4. Desainer visual
5. Desainer antar muka
6. Desainer interaktif
7. Seniman
8. Analisis masalah
9. Desainer instruksional
10. Penulis
11. Animator
12. Produser audio
13. Komposer musik
14. Produser video
15. Pemrogram
16. Pemrogram web
17. Ahli media
18. Direktur pemasaran

Organisasi Multimedia (Villamil-Molina)



Organisasi Multimedia (Luther-Sutopo)

1. Concept (pengonsepan)
2. Design (pendesainan)
3. Material collecting (pengumpulan materi)
4. Assembly (pembuatan)
5. Testing(pengujian)
6. Distribution(pendistribusian).



Langkah-langkah dalam merencanakan produksi aplikasi multimedia

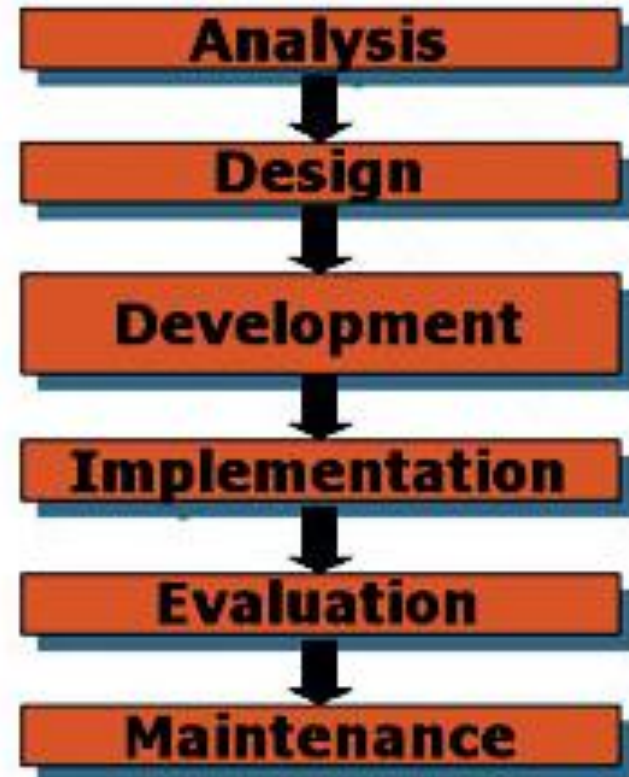
Langkah-langkah dalam merencanakan produksi aplikasi multimedia (1)

- a. Menyusun program script atau konsep
- b. Menggambar sketsa program
- c. Menyusun bagan alir
- d. Menyusun storyboard
- e. Merancang antar muka pemakai
- f. Menyiapkan script untuk narasi, text, dan video
- g. Memperhatikan hak cipta
- h. Merencanakan produksi musik, audio, video
- i. Menyiapkan penjadwalan proyek dan pembiayaan

Project Phase

System Development Life Cycle (SDLC)

The SDLC is a standard series of processes for creating multimedia applications.



Royce's waterfall model

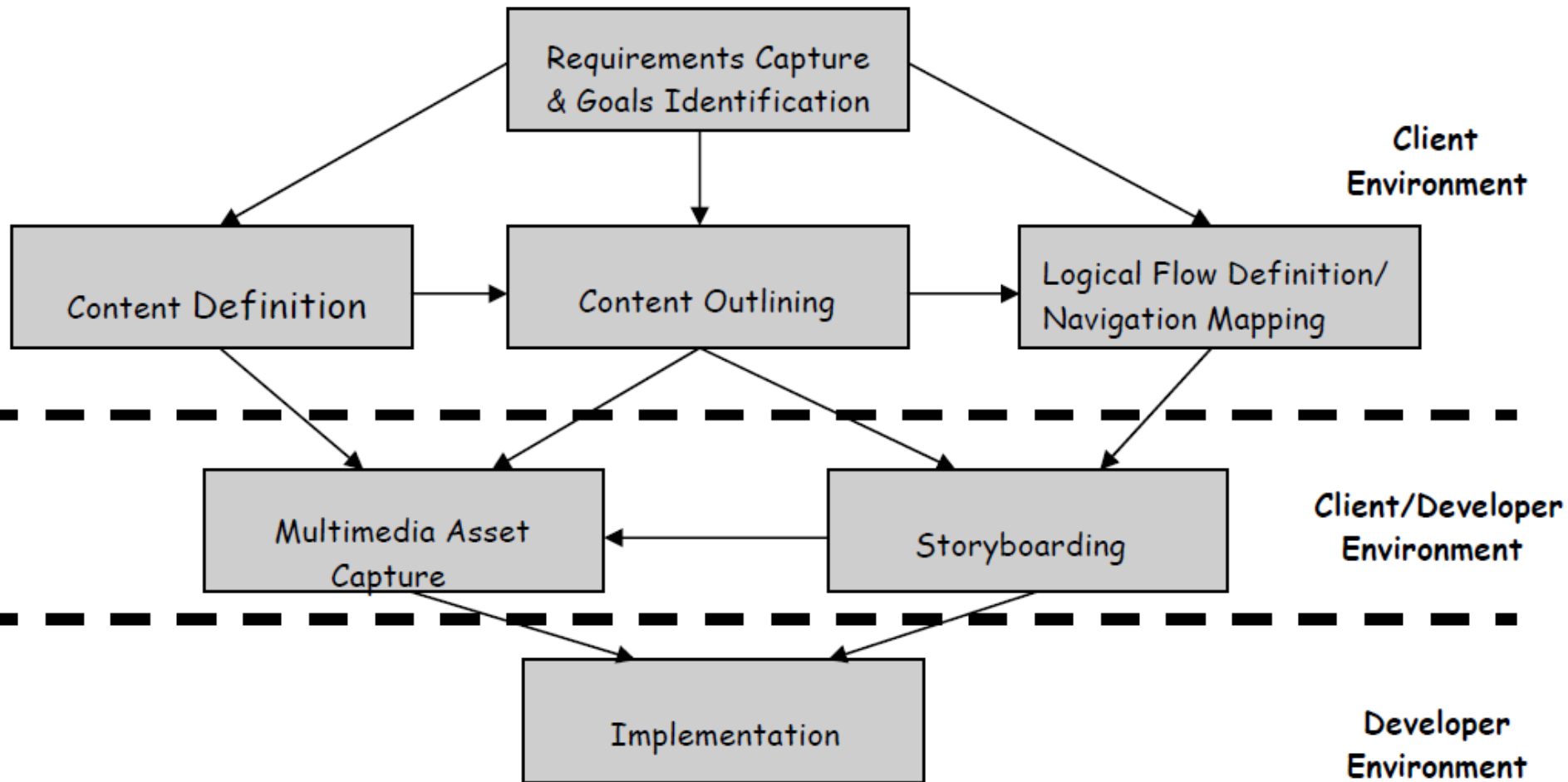
Software development process:

- Requirements specification
- Design
- Construction (a.k.a. Implementation or Coding)
- Integration
- Testing and debugging (a.k.a. Validation)
- Installation
- Maintenance

The Design Process Multimedia (2)

- a. Requirements and Goals
- b. Content Definition
- c. Content Outline
- d. Logic Flow Definition
- e. Navigation Mapping
- f. Storyboarding
- g. Asset Capture
- h. Implementation

The Design Process Multimedia (2)



Tahapan Proyek Multimedia (3)

- Perencanaan dan pembiayaan
- Desain dan produksi
- Pengujian
- Pengiriman

□ **Perencanaan dan pembiayaan:**

- **Kebutuhan proyek dianalisis dengan menguraikan tujuannya.**
- **Sebuah rencana yang mencantumkan keahlian/pakar multimedia yang dibutuhkan, dipersiapkan.**
- **Sebuah template grafis, struktur, dan sistem navigasi dikembangkan.**
- **Perkiraan waktu dan anggaran disusun.**
- **Sebuah prototipe pendek atau konsep disusun.**

□ **Desain dan produksi:**

- Tugas yang direncanakan dan dilakukan untuk menciptakan sebuah produk multimedia.
- Produk ini direvisi, berdasarkan pada umpan balik terus-menerus yang diterima dari klien.

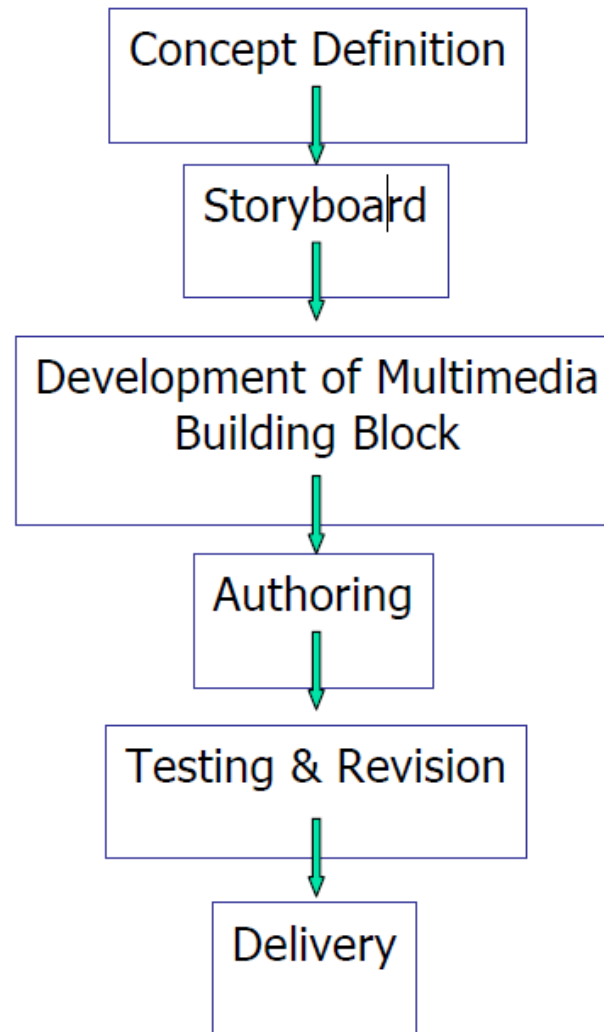
□ **Pengujian**

- Program ini diuji untuk memastikan bahwa memenuhi tujuan proyek, dan memenuhi kebutuhan klien.

□ **Pengiriman**

- Hasil produk multimedia akhir ini dikemas dan dikirim ke pengguna akhir.

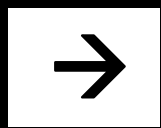
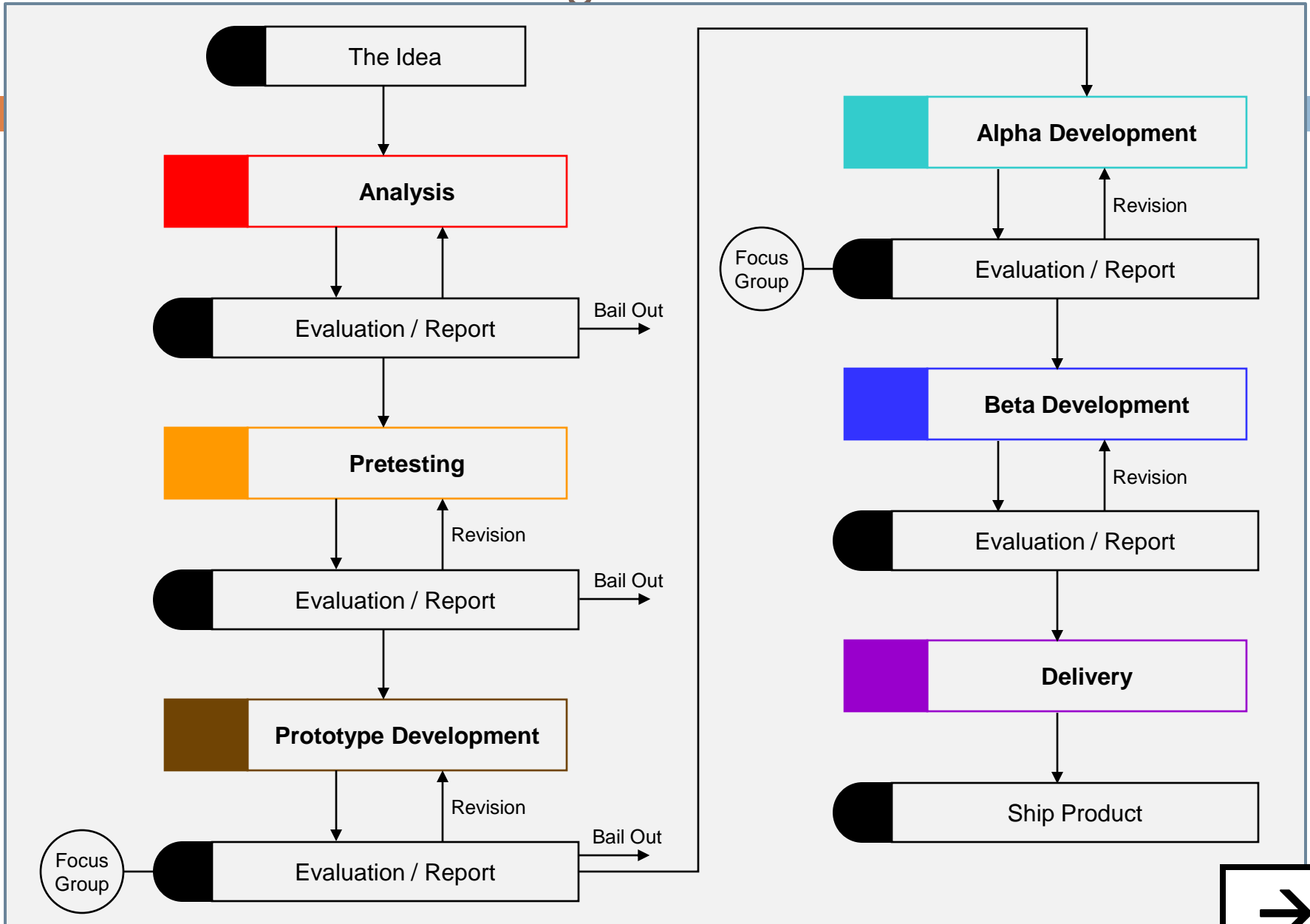
From Application Planning to Product Delivery (4)



The Process of Making Multimedia (5)

- Analysis
- Pretesting
- Prototype Development
- Alpha Development
- Beta Development
- Delivery

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**



**Back to The Process of
Making Multimedia**

Pretesting

1

Define Project Goal

2

Define Skillset needs

3

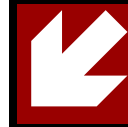
Create Content Outline

4

Position Sales & Marketing

5

Create Prototype on Paper



Back to 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



**Back to The Process of
Making Multimedia**

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**



**Back to The Process of
Making Multimedia**

Beta Development

1

**Distribute to
Limited Tester
List**

2

**Respond to
Bug Reports**

3

**Prepare User
Docs**

4

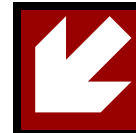
**Prepare
Packaging**

5

**Develop Gold
Candidates**

6

**Announce to
Press and PR
Lists**



**Back to 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**



**Back to The Process of
Making Multimedia**



Anatomy of Multimedia Project (6)

Defining a Project

Several steps are required to define a multimedia project.
They are:

- ▣ Meeting with the client
 - to determine the project's budget and deadline
- ▣ Determining the project's
 - overall purpose and specific objectives
- ▣ Defining the audience
 - who will use or view the application
- ▣ Determining how the application will be delivered
- ▣ Determining the technical and content requirements

Project Design Phase

- After the team has analyzed the application's objectives, audience, and requirements, the project enters **the design phase**.

What is a project plan?

- A project plan generally specifies:
 - the project's scope,
 - its personnel,
 - other resource requirements,
 - its schedule, and
 - its budget.

Defining Project Scope

The team sets priorities and collaborates about:

- The application's content
- The application's size
- The hardware and software it will involve

Proposal: Mohave Window Shutters Web Site

Description:

Create an Internet Web site for window shutters company. Site to include about 20 product photos and 15 line art diagrams, to be created for client. Site to include ~~three~~ 30-second video clips including narration.

Audience:

New home owners, income over \$50,000/year. Have home computers with video and audio capabilities to support multimedia viewing.

Programming:

Site may be viewed by Explorer, Netscape, or AOL browser on both the PC and Mac. Primary programming to be executed in Flash.

Proposed Budget:

Photography	Writing & Design	Videography	Programming
\$1500	\$2500	\$2000	\$2000

Total for Web site creation: **\$8000** TRIM PROJECT COSTS TO \$6000

- Use fewer photos
- Remove one video
- Program fewer hyperlinks
- Eliminate video narration

Defining the Project Schedule

With input from the team, the project manager draws up a schedule for developing the application.

Proposal: Mohave Window Shutters Web Site

Resource Allocations:

<i>Video & Product Photography</i>	<i>Graphic Design</i>	<i>Navigation Map & Writing</i>	<i>Programming</i>
Burton Photography	Missy Saunders	Leann Syrotuck	Tim Fischer
Schedule shoot: October 8	Create prototype Due: October 7	Write content Due: October 15	Site structure Due: October 23
Video & product scans due: October 20	Final designs to programmer Due: October 21	Final content review Due: October 20	Create Alpha site for review Due: October 28

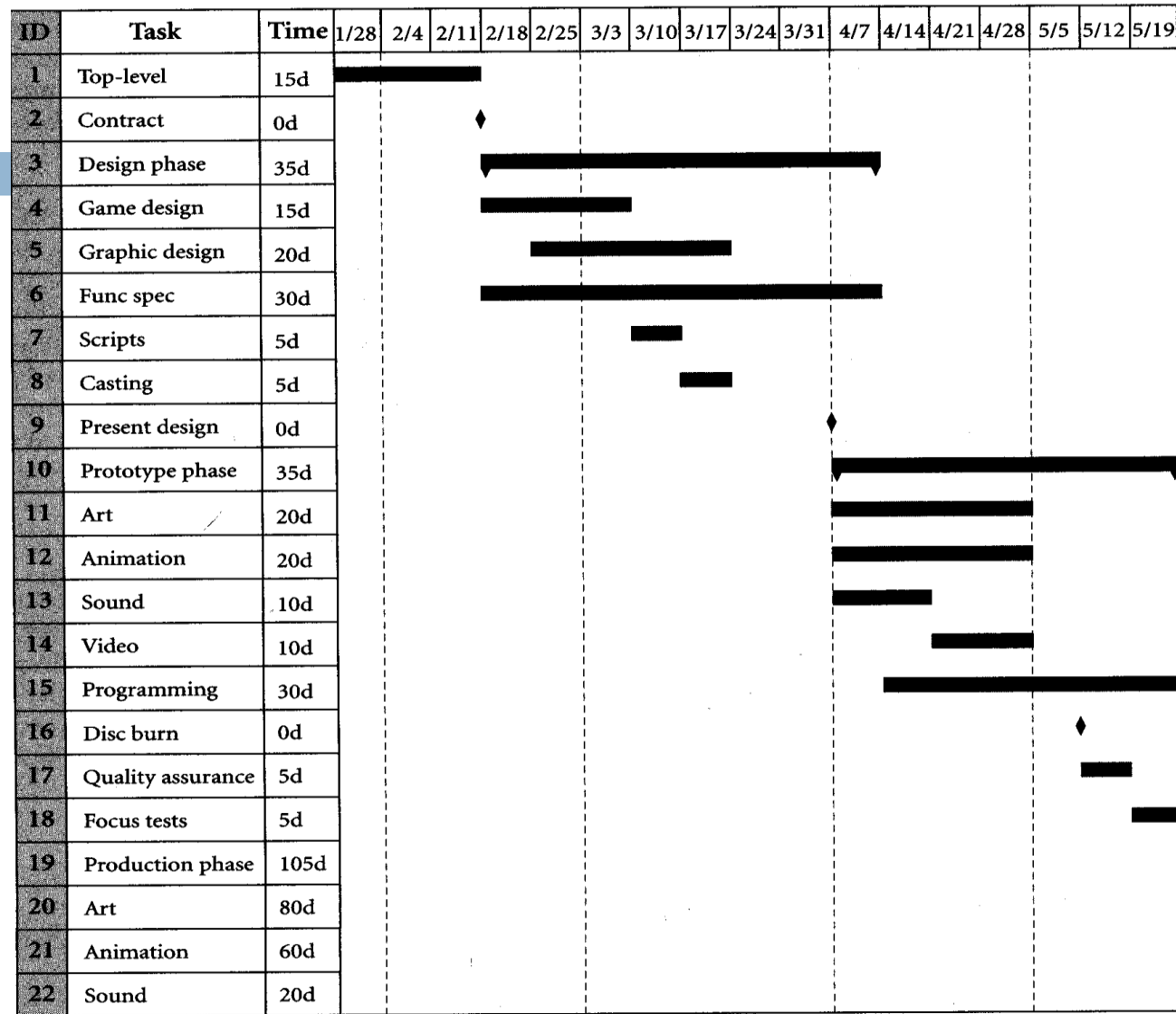
Timeline for Production:

Start Date	Prototypes	Alpha Site	Site Launch
Sept. 15	Oct. 7	Oct. 28	Nov. 10

FIGURE 8.1 Preliminary Development Plan

Time Line

Gantt Chart



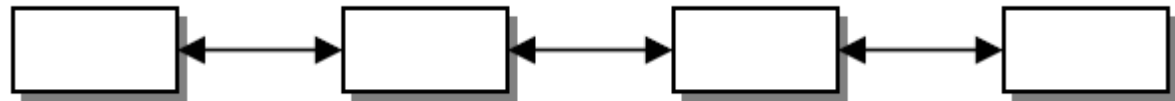
Sample preliminary development plan. The producer makes an educated guess about the length of time each task will take and uses experience to schedule the tasks in the proper order and to determine any dependencies. Later, when the product is fully designed, the producer develops a very detailed and comprehensive plan, with tasks broken down into many subtasks.

Designing the User Interface

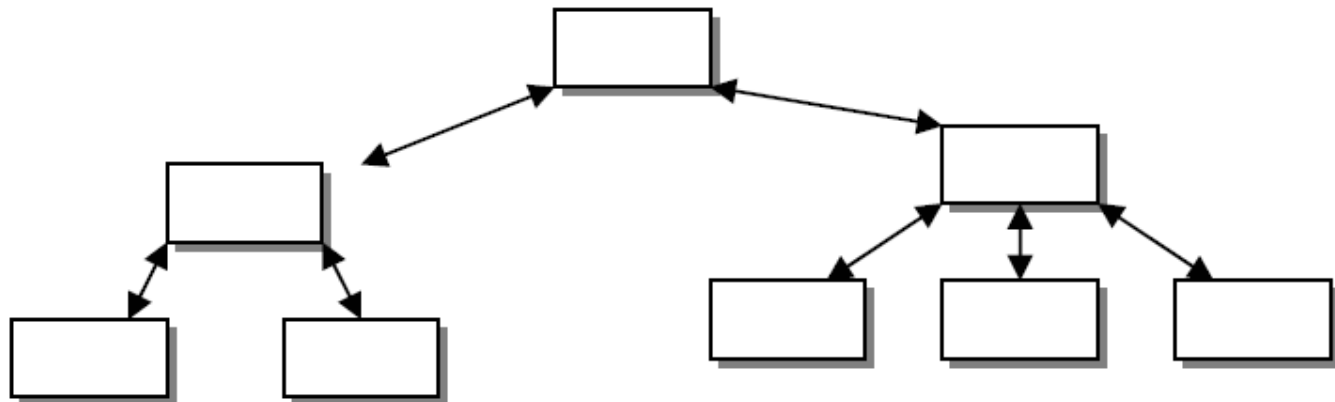
- The user interface designer creates a navigation map. Navigation schemes can be:
 - Linear
 - Hierarchical
 - Nonlinear
 - Composite

4 Struktur Dasar Peta Navigasi (site map)

1. Linier → pengguna melakukan navigasi secara berurutan, dari frame atau informasi satu ke yang lainnya

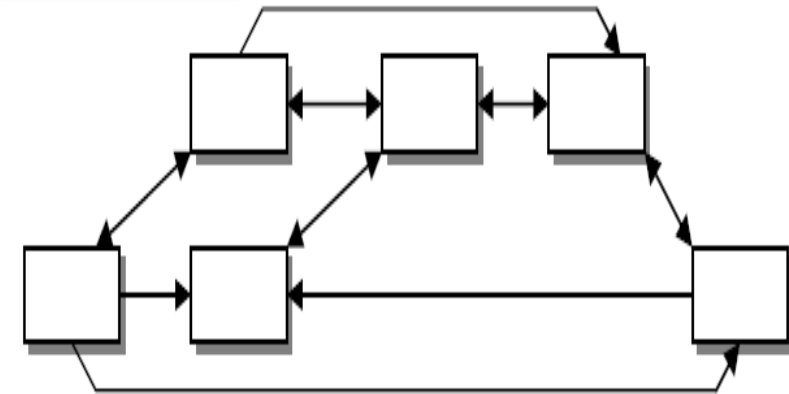


2. Hierarkis → disebut juga linier dengan percabangan; pengguna melakukan navigasi sepanjang cabang struktur yang terbentuk oleh alur dari isi

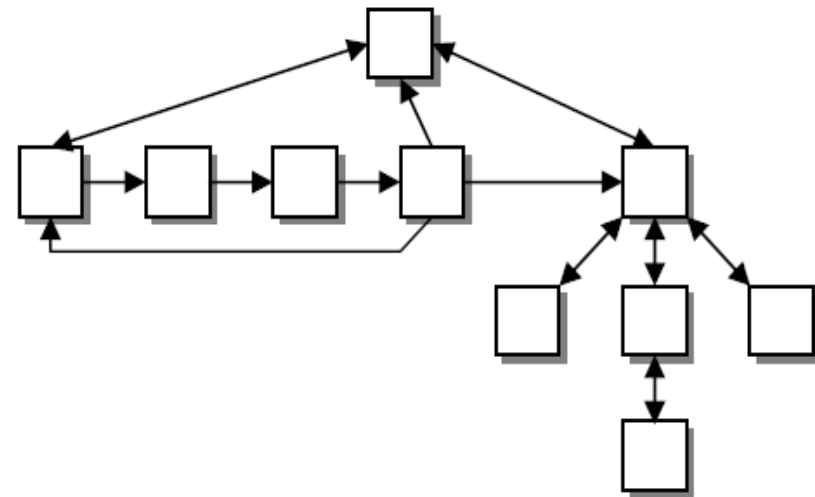


4 Struktur Dasar Peta Navigasi (site map)

3. Non-linier → pengguna melakukan navigasi dengan bebas melalui isi proyek, tidak terikat dengan rute yang telah ditetapkan sebelumnya



4. Komposit (campuran) → pengguna melakukan navigasi dengan bebas, tapi terkadang dibatasi oleh presentasi linier film atau informasi kritis dalam suatu hierarki



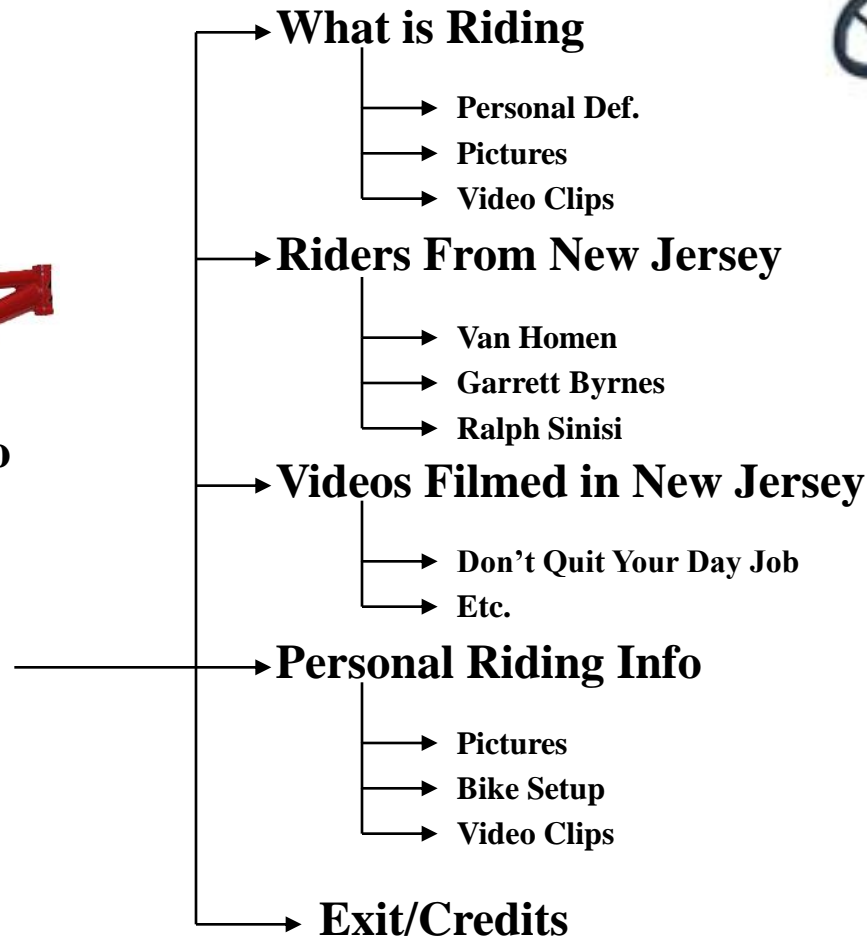
Logic Flow



Title & Intro



Main Menu



Developing an Application

- Once the project plan is approved, the team begins creating the application. This includes:
 - Visual content
 - Written content
 - Documentation
 - Audio
- Production
- Testing

Development

- Visual development
 - ▣ Characters, locations, style
- Writing
 - ▣ Script
 - Series bible
 - Pilot script
 - Production script
 - Drafts and final

Pre-Production

- Design and art direction
 - ▣ Visual style guide
- Storyboarding
- Timing
 - ▣ Story (Leica) reel and animatics

Storyboard Functions

- Conceptualization
 - ▣ Visual thinking
- Key moments
- Flow and transition
- Detail, composition, and aesthetics
 - ▣ At least one detailed image for each scene
- Logistics

Storyboard Example



Storyboard Example

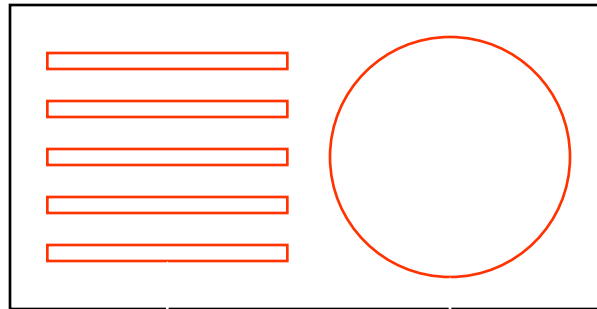


CLIENT: SendTec Inc.
PRODUCT: Cosmetique



Storyboard Example

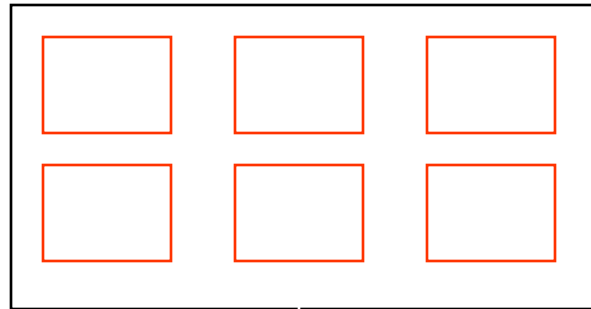
Main Menu



Menu Items

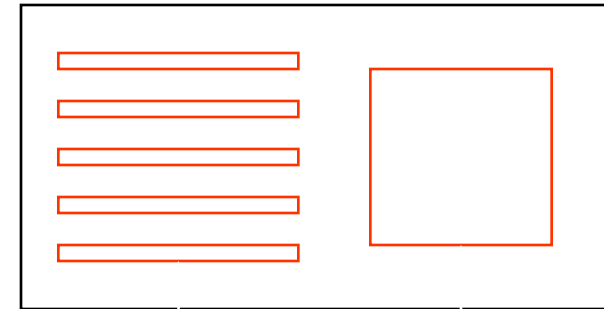
Picture

Albums Menu



Menu Items (Pictures)

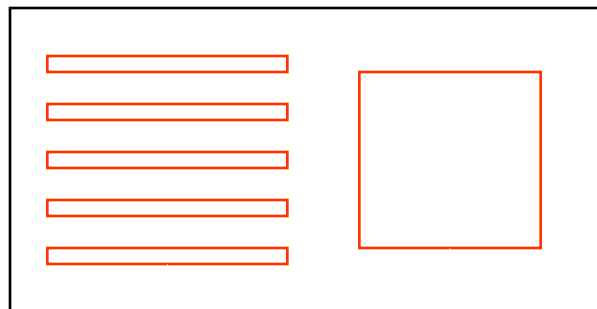
Album Info



Text

Picture

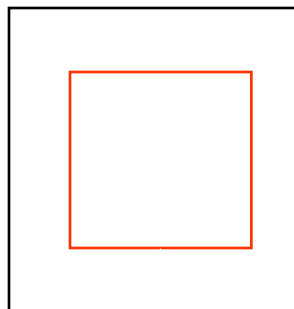
Biography



Text

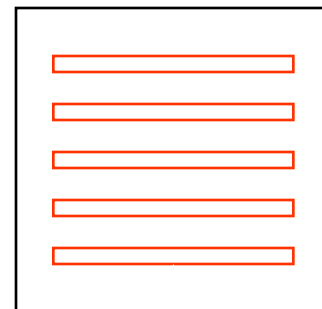
Pictures

Video



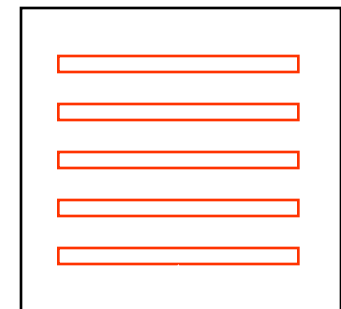
Video

Website & FAQ



Text

Credits

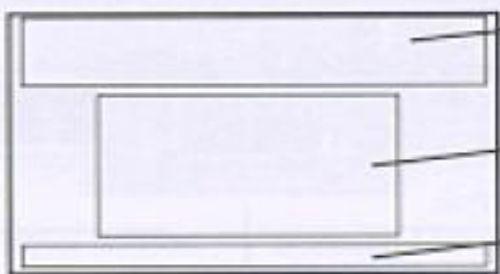


Text

Storyboard

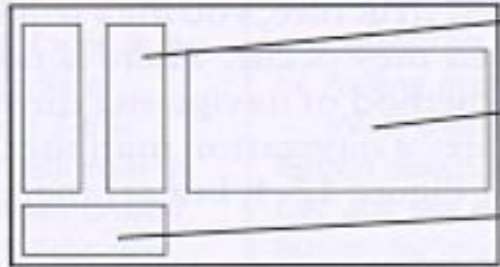
A graphical representation of your screen layout

Storyboard



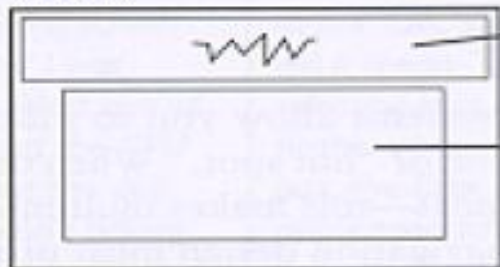
- Title (use a gradient) sans serif, clean type
- Menu, five buttons
- Navigation bar, Quit, About

Card 1



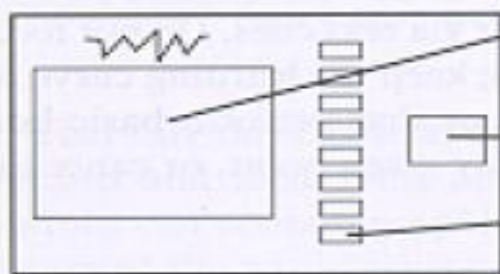
- Visual effects
- Sample image for visual effects
- Timing and speed controls

Card 2



- Section title
- Menu

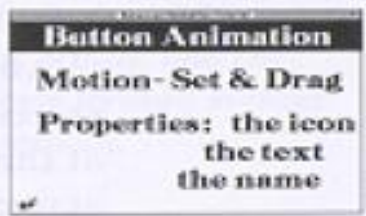
Card 3



- Blowup of icon in Fat Bits
- Animated icon
- Individual icons

Card 4

Final Rendering



Planning Motions and Camera Shots

SEEKING 'STOCK' INTERPRETATIONS 5.



STADIUM FOLLOWS C.M. GUN MOVES TO CARDIFF.



OVER THE SHOULDER SHOT TO CARDIFF



C.U. CARDIFF TURNS



MARY: P.O.V. (CARDIFF)



C.M. GUN 200mm LENS



M.S. (TWO-SHOT) CARDIFF: W.H.A. THROUGH BINOCULARS (P.O.V.) ASSASSINS FROM ACROSS THE WAY.



3

Director JOHN CAMERON '97

QUICK SKETCHES FROM MEMORY

COMPOSITION OF SHOTS CAMERA MOVEMENT

1 M.S. TWO LOVERS ON PROW OF SHIP. NOTE: FRAMES FORMATTED FOR WIDESCREEN

2 M.S. CAMERA MOVES UP PROW OF SHIP AS HE MOVES BEHIND HER. RATIO: 24 TO 1

3 → TO SEA GULLS EYE VIEW

4 MANS GOES OVER HEADS OF LOVERS TO REAR MEDIUM SHOT. HE PUTS HIS HANDS AROUND HER WAIST. ADD SOME DIMENSION

5 TO CLOSE UP OF LOVERS HOLD ON SHOT. ADDING MORE DETAIL

FLUID CAMERA WORK.

Pyramid shapes start with stick figure

ADD SOME DIMENSION

Digital Production

1. Design
2. Modeling
3. Rigging or kinematics
4. Skinning
5. Surfaces
6. Environment
7. Staging/workbook → cinematography,
8. Animation → Camera movement
9. Lighting
10. Effects
11. Rendering

Camera Shots and Moves



EXTREME CLOSE-UP



CLOSE-UP



MEDIUM CLOSE-UP



WAIST



MEDIUM



KNEE



WIDE



LONG



MEDIUM LONG



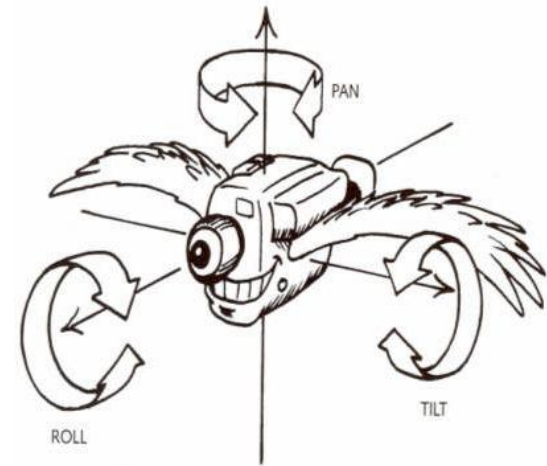
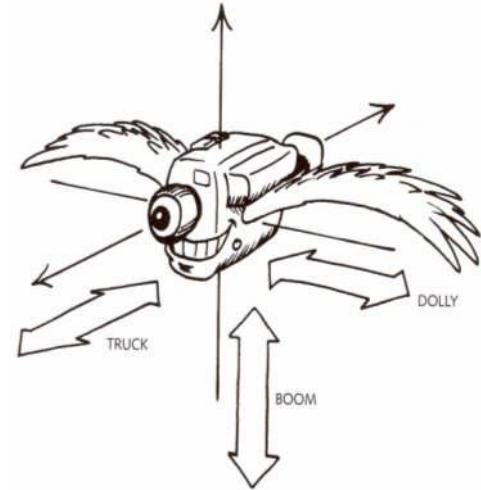
POINT OF VIEW



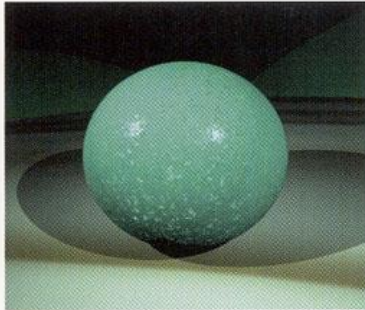
LOW ANGLE



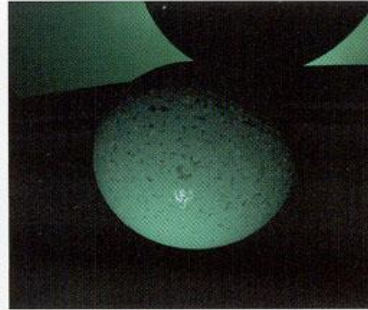
HIGH ANGLE



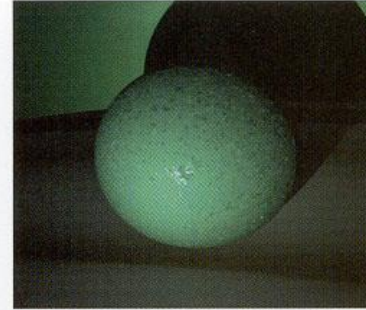
Basic Light Positions



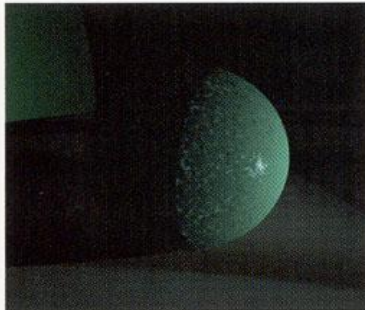
PAIR AT A 45 DEGREE ANGLE



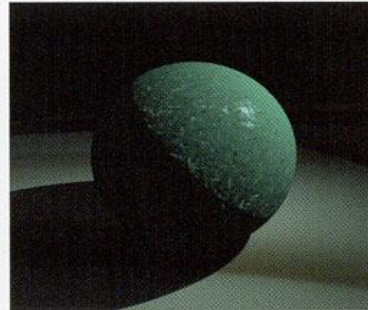
FRONTAL FROM BELOW



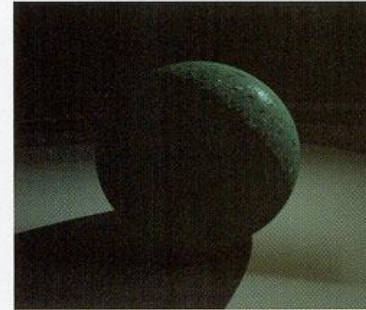
FRONTAL AT SUBJECT'S LEVEL



LATERAL AT SUBJECT'S LEVEL



LATERAL ABOVE SUBJECT



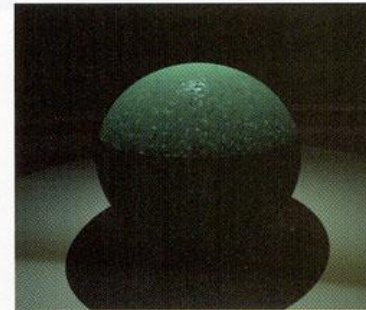
LATERAL ABOVE, BEHIND SUBJECT



BACK ABOVE SUBJECT



BACK SIDE OF SUBJECT



OVERHEAD

Post-Production

- Image retouching
- Image compositing and blending
- Image sequencing
- Colour grading
- Music and sound mixing

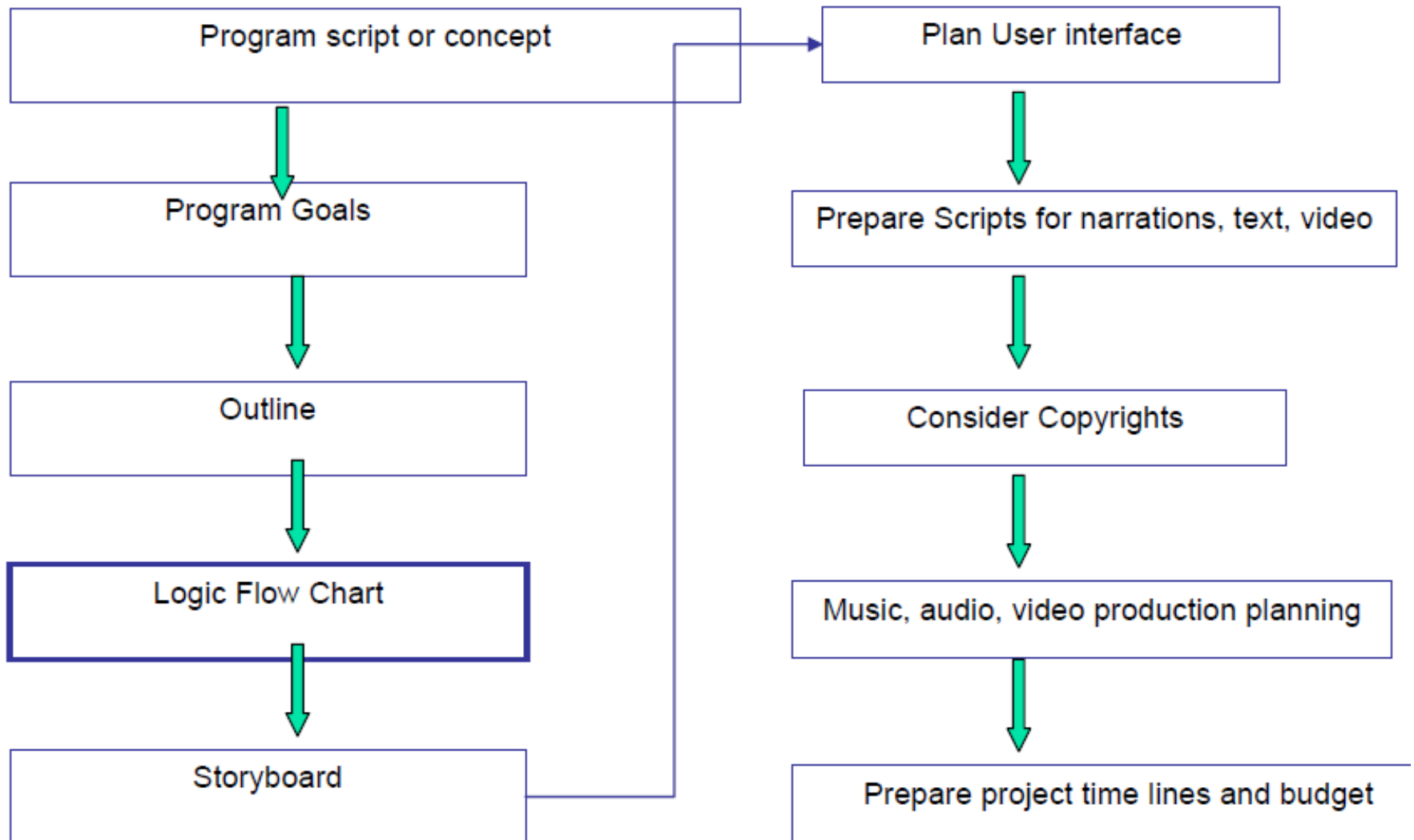
Output

- Pixel, colour, and time resolution
- Image format and compression
- Aspect ratio
- Video format
 - ▣ File
 - ▣ Signal

Testing the Application

- The application is tested to ensure that the sections work together correctly.
 - ▣ Alpha testing involves testing sections as the producer finishes.
 - ▣ When all sections are complete, the entire application is tested.
 - ▣ A large application may also be beta tested.

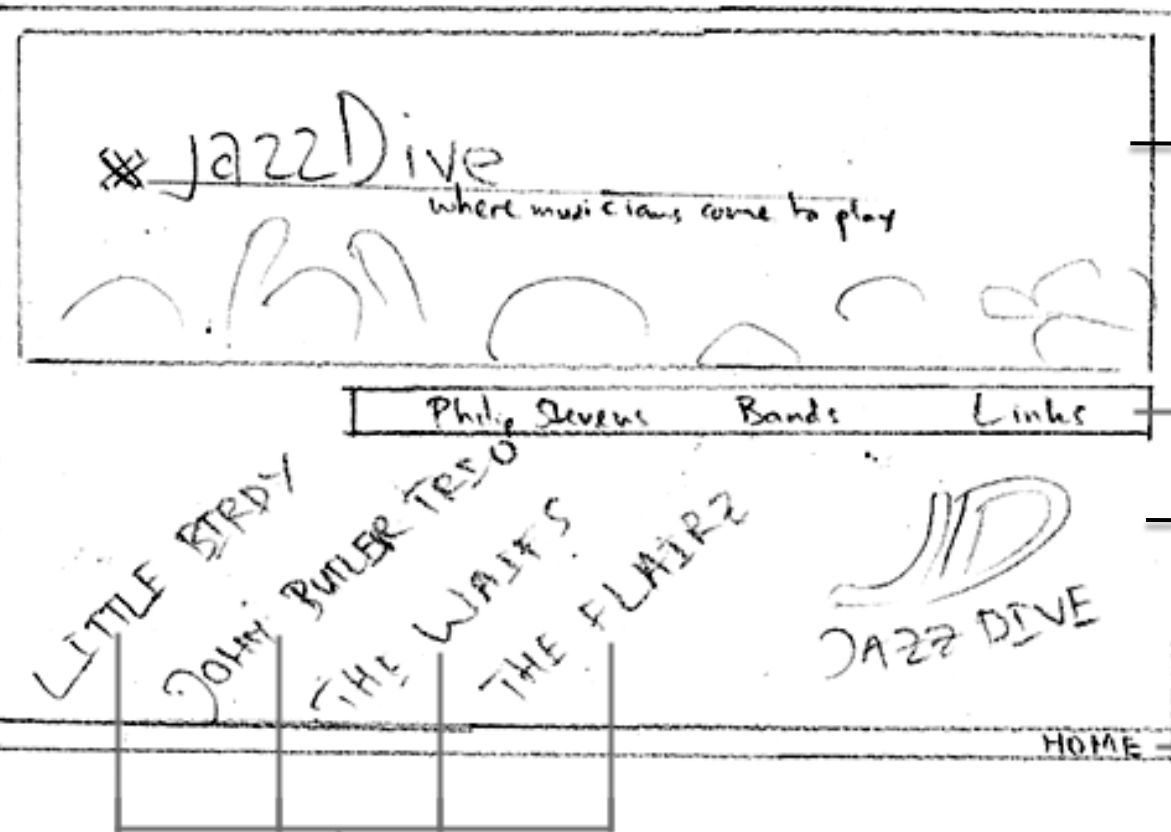
Multimedia Project Chart





Sample of Multimedia Project

Storyboard



Logo Banner : A visual of the band in a concert with the Band's name and slogan. (details on S02)

Main menu panel (details on S02)

Background color : yellow to white horizontal gradient

Cascading menu panel

Band Groups : Typeface → Impact, 14 pt. Grey, opacity 50%

Textual Storyboard

- Logo Banner :
 - ▣ Band name Typeface : 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

Output

Macromedia Flash Player 7

File View Control Help



[Philip Stevens](#) [Bands](#) [Links](#)

LITTLE BIRDY
JOHN BUTLER TRIO
THE FLAIRZ
THE WAIFS

JAZZ DIVE

Home