

3/5/25
(After mid)

Morphing
controls

① User Interface Design Patterns :

⇒ Getting inputs:

- ① Drag and Drop
- ② Fill in the blanks (Many options)

⇒ Menus

- ① Vertical Dropdown Menu
- ② Horizontal Dropdown Menu
- ③ Accordion

⇒ Content:

- ① Adaptable View
- ② Article List
- ③ Tagging
- ④ Categorization
- ⑤ Pagination

⇒ Archive Design Patterns

⇒ Persuasive Design Patterns

① For Accessibility, we use
WCAG (Web Content Accessible Guidelines)

⇒ We wanted to make course portal
and added HCT course and added

contents in it. (Article list)

Navigational

- ① Tag Cloud (Important words)
- ① Carousel ② Favourites
- ① Breadcrumbs ① Fat Footers (^{shortcuts}_{in footer})
- ① Lazy registrations

⇒ Explaining the Process:

- (difference { ① Wizard (Step followed by steps))
Question for Exam } ② Steps Left
③ Completeness meter
④ Inline Help Box

Opinion weighs
of community)

Community Driven:

- ① Rate content ^{by quality} ① Vote to Promote ^(Promote something)
- ① wiki ^{can produce} _(and manage content)
- ① Paid to promote

⇒ Dealing with data:

- ① Tables ① Formatting

- ① Copy Box ← ① Images

- ① Search

- * ① Activity → Case Study, Paper show

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① SDLC:

① Preliminary idea Generation

② Req. analysis

what { (Functional Reqs
Non Functional)

: HCI

Design

③ Design

(UI/UX)

process

④

→ User Interface: Screen design

Interaction: Process (Simplified)

Experience

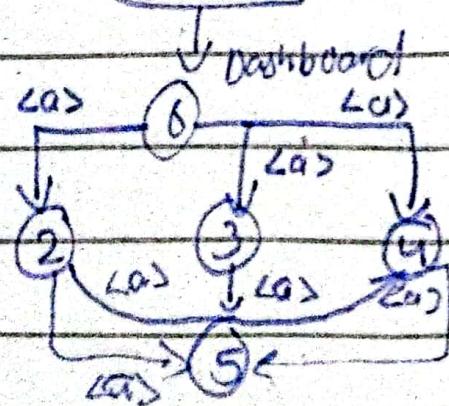
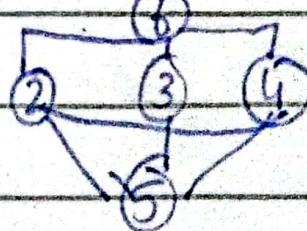
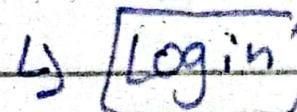
① Email

↳ ① Login → ② Compose

③ View Inbox ④ Password

⑤ Sitemap ⑥ Dashboard

(site hierarchy)

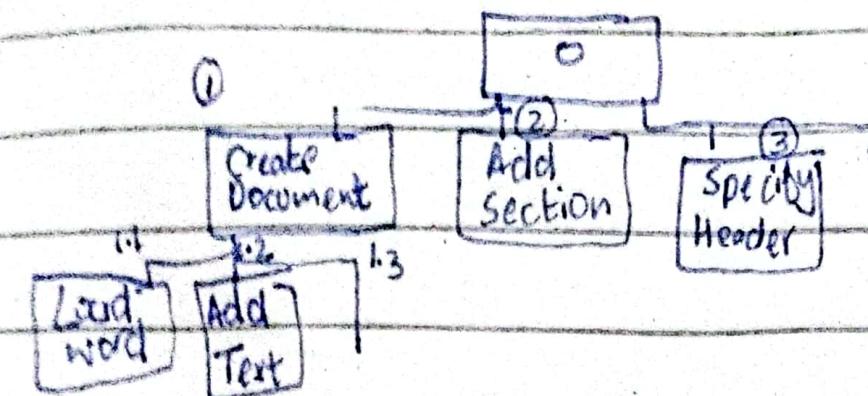


① Verification and Validation (check for error)

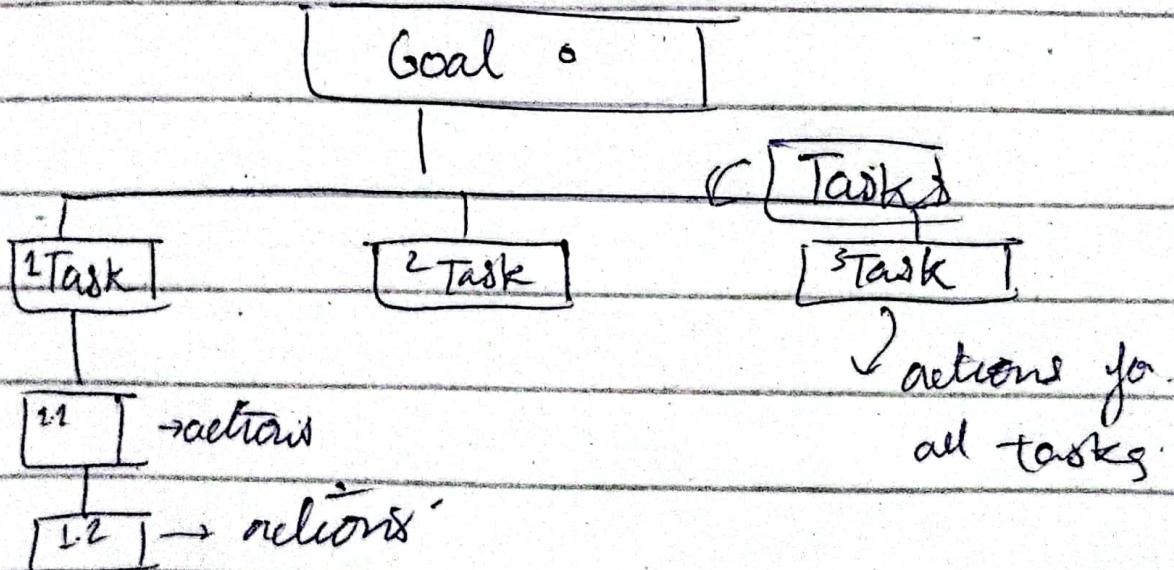
→ ISO usability standard 9241
(adopts traditional usability categories)

(i) Effectiveness (ii) Efficiency ...

② Goal - Adding multiple headers



Hierarchical Task Analysis



Plan 0: if doc not created then do 1
else

Plan 1: do 1.1, 1.2, 1.3, 1.4

→ HCI Design Process:

(i) User Research

↳ Primary

↳ Secondary

(check existing solutions)

: Interviews with Stakeholders

: Questionnaires

: CMS

: Observations /

(ii) Requirements Analysis

↳ Functional

↳ Non-Functional

: Sketches (Wireframing)

① Assign ② Assignment

Modify →



③ Empathy Map

(Easy to access & use)

④ Reset Password

Password → Change password

Type Pass → ReType Pass

(iii) User Flow

(iv) Hi Fidelity Prototyping

[Hi-Fi] [Screen & color arrangement]

: Mockup
App
(Like
Figma)

MIT appinventor

(All widgets etc... present there)

(Easier than FIGMA but

FIGMA is industry wise
widely used)

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→ Storyboarding : Ch#5

→ Mockups

(a) → Wireframe Model : Low fidelity prototypes

→ Visual Design

→ High Fidelity Prototype

① Campus Buddy:

→ I don't want to miss
an important event

→ Events listing [Priority]

→ Add to calendar

Reminder

Notify

② Personal: ② Mwa ② 20 years, classes

② Academic Events

③ Painpoints:

- Many steps are limited to
schedule reminder

- Clash of events

(1:00 - 2:20
1:30 - 2:30)

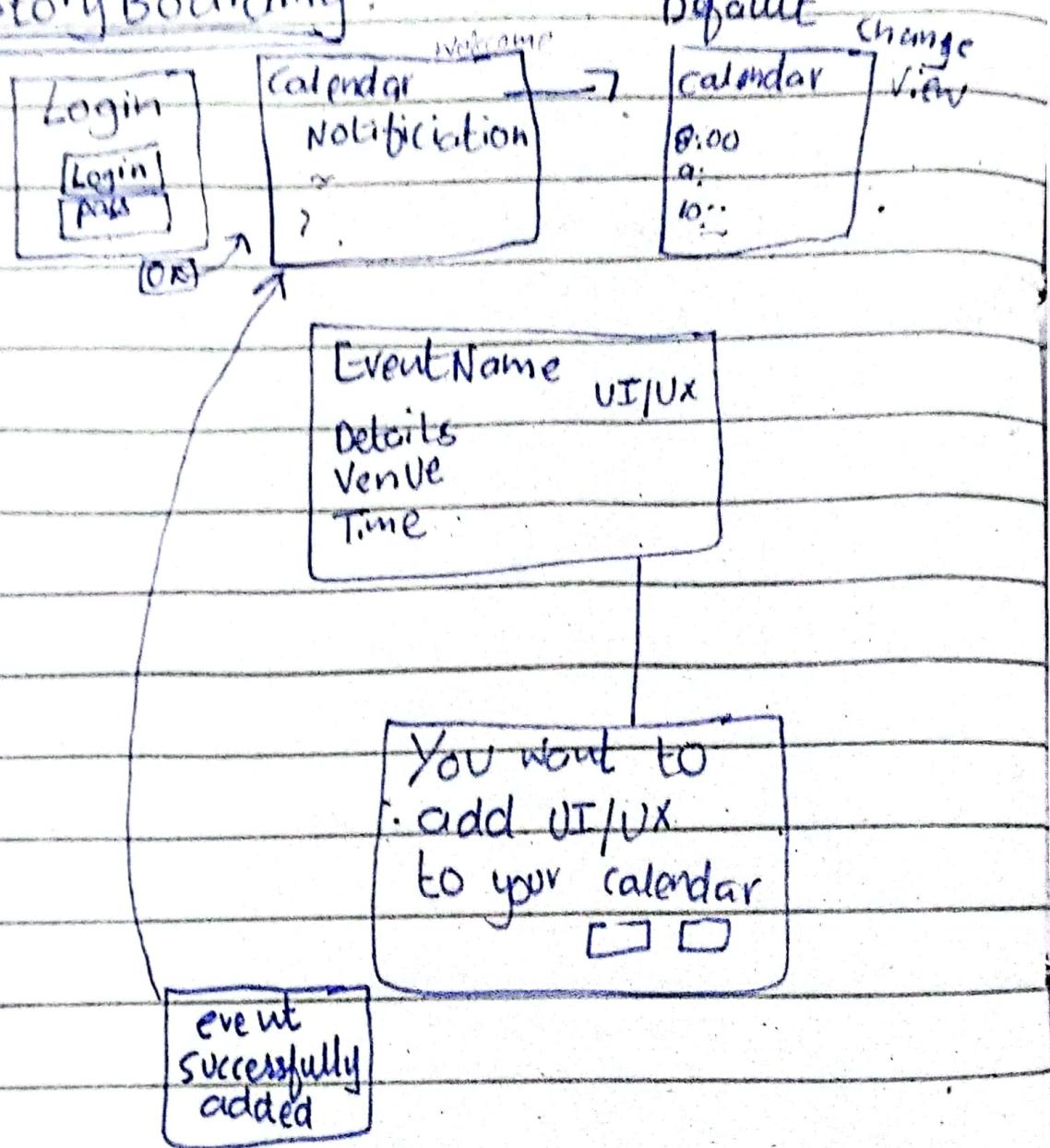
- Schedule

» ② Sara ② 20 years ② Timings (no event
before and after events)

① User flows:

[view] [login → view calendar → setOK
↓
check event]

② Storyboarding:

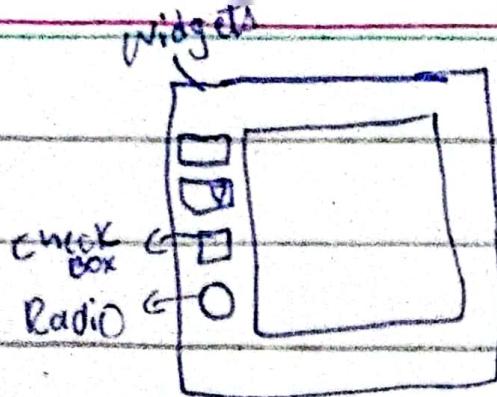


③ Low Fidelity:

→ Level of details: low

④ HCI is based on

User centered Design = [Responsive Design]



: example
persona
(Betty)

- ① Cultural probes, scenarios



DRAFT forward

forward all

- ① Linearity, levels, xR (Extended reality)

the web (widget choice, screen design)

- ① Four Golden rules (where, what, modes (lock to prevent, if lock forgotten), hierarchical diagrams, network diagrams)

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* Designing an application:

X Overcrowded

✓ Natural flow, the way

we proceed

- ① Appropriate widgets

- ① Text-Box, Text-Areas

① Aesthetics:

① Over usage of color

② Aesthetics vs

usability

[3-4 colors]

- No -
Colorblind
[Red, Green]

→ FIGMA → from Google Account.

③ Frame Selections

④ Sections Information

⑤ Design and layout:

→ Login

→ Personal (Name, FName, CNIC)

→ Contact

→ Academic → Experience → Reference

⑥ Not exact implementation

only design.

⑦ Basic tools

⑧ Available tools:

→ Grouping of items

→ Order of items (think, should, instructions)

→ Decoration + fonts, boxes etc....

→ Alignment of items

→ White space between items

⑨ Knowing What to do:

→ What is active or passive

→ Where do you type

① Presenting Information:

- Purpose matters
- Paper presentation

② Colour and 3D:

- Use colors and 3D effects in effective way to distinguish easily
- Overcolor (Bad use of colors)

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① Travel Mate App:

- ? find travel Mate
 - ↳ Personality
 - ↳ Destination
 - ↳ source

⇒ User Research:

① Primary Research

→ Interviews

→ Questionnaires

② Secondary Research

→ Existing apps

→ Existing literature → GenAI

• Comprehension
and creativity

① User Stories:

→ IDEATION

② persona's (Musa 22 years)

③ User flows:

④ Flow Charts Link

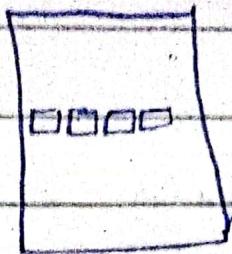
⑤ Visual Design:

⑥ Widget Design, Screen Design

Application

Navigation

Environment



⑦ → Sketches → A/B Testing

→ Design (medium Fidelity)

→ Prototype (High Fidelity)

⑧ interaction-design.org

⑨ Typography:

⑩ Text → legible
(readable)

: legible
readable

- font face

: g

- line heights

grass Peter 512

- baseline

cat letters 94 37

⑪ fixed pitch

: Variable

→ Typegraphy:

① TypeFace

② Serif

(H E) (printing)
(stroke)

Sans

(H E) (screen)

Chinese

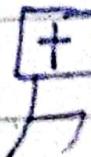


(S)

X C

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II - 3



- BOY

③ Alignment:

④ Right, Left Align.

⑤ Visual Design:

⑥ User Aesthetics

⑦ Experience

⑧ Affective Computing, inclusive design (not excluding any category of stakeholders in design), responsive design.

⑨ Visual Design Elements:

→ Shapes (1-D, 2-D, 3-D, Volume)

→ Tag Cloud