Software Engineering

Week-6-Lesson-1
Prototyping-GUI

Daffodil International University

List of Topics

- What is Software Prototyping?
- Benefits of Software Prototyping
- Types of Prototyping
- Creating Paper Prototypes
- Creating High-Fidelity Prototype

Software Prototyping

- A Software prototype is a **draft version** of software program that allows you to explore your ideas and show the intention behind a feature or the overall design concept to users before investing time and money into development.
- Prototyping can be considered as a risk reduction activity

Prototyping Benefits

- Misunderstandings between software users and developers are exposed
- Missing services may be detected and confusing services may be identified
- Sometimes it helps to demonstrate the concept to prospective investors to get funding for project.
- It reduces risk of failure, as potential risks can be identified early.

Types of Prototyping

- **Low-Fidelity Prototyping**
  - **Paper prototyping**
  - **Mockups**
- **High-Fidelity Prototyping**
  - Macromedia Director or Flash, Smalltalk , Java Script, Microsoft Tools, HTML

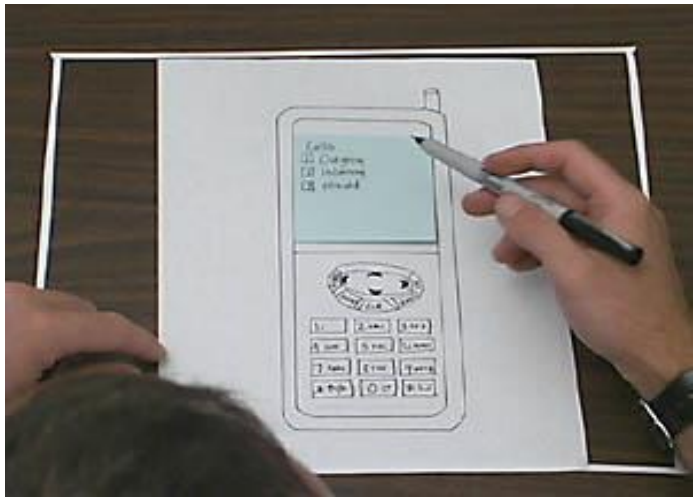
Low-Fidelity Prototyping

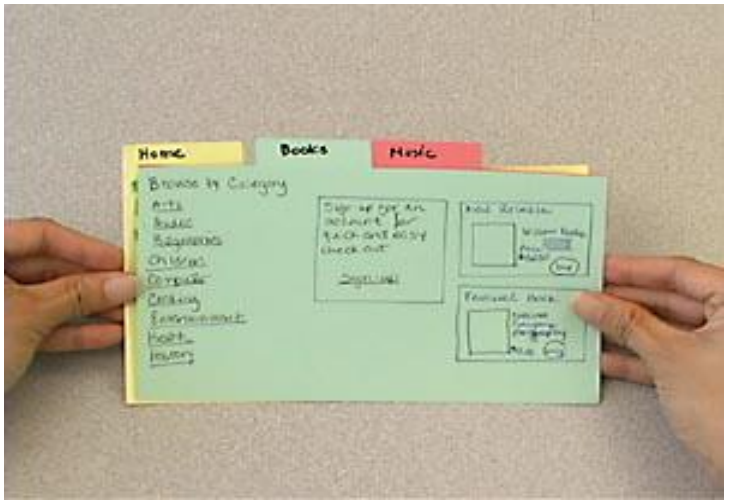
Tools for Paper Protyping

- Pen
- Pencil
- Color Pencil
- Rubber
- Paper
- Eraser
- Scale
- Scissor

Low-Fidelity Prototyping

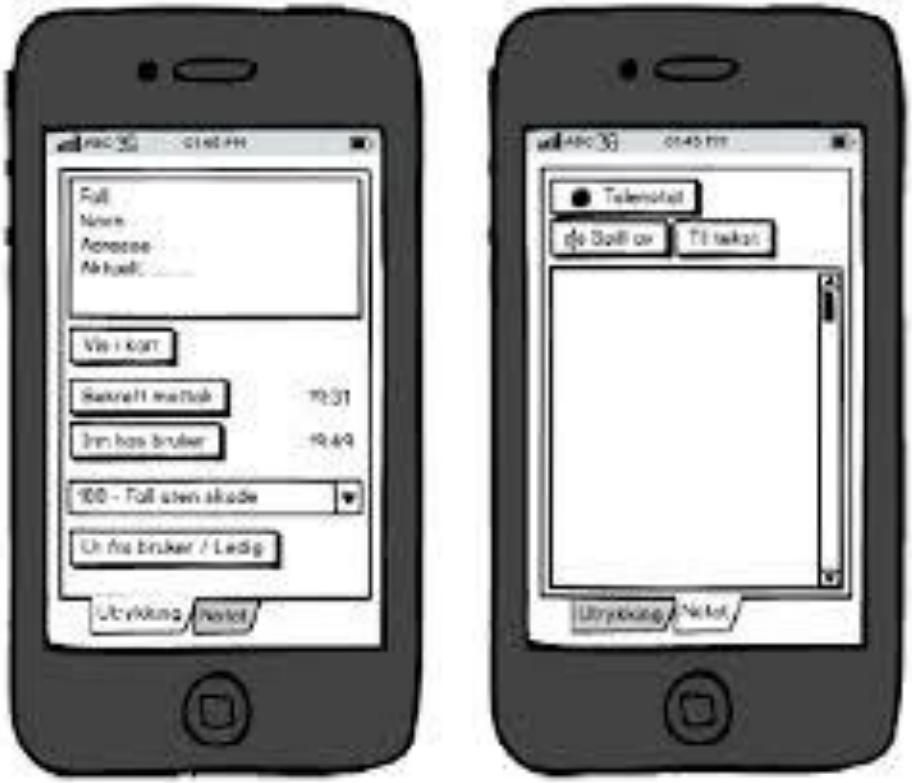
- Does not look very much like the final product. Material, behavior etc.
- Material such as paper & cardboard rather than electronic screens, metal and detailed code.
- Simple, cheap & quick to produce and redesign.
- Early stage of development –prototyping for the conceptual design.

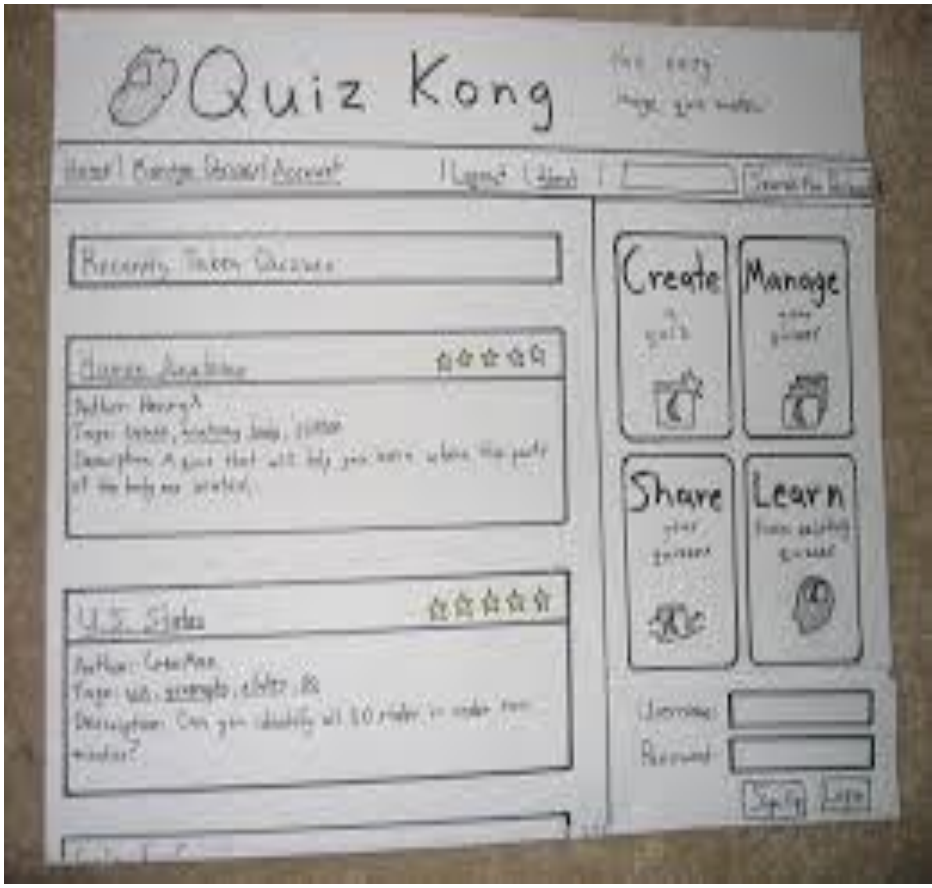




Creating Low-Fidelity Prototyping

Creating Low-Fidelity Prototyping





High-Fidelity Prototyping

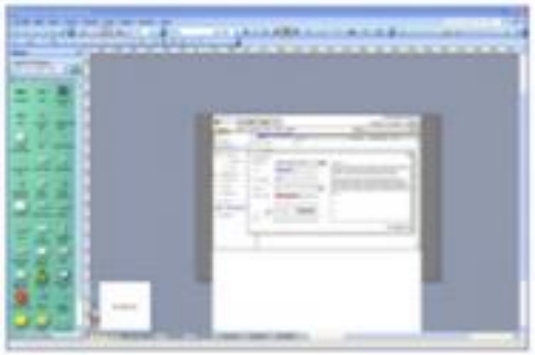
- Looks very much like the final product.
- If the prototype is for software system, a software tool, such as Macromedia Director or Flash, Visual Basic or Smalltalk, might be needed.
- Software prototype tools are also often qualified development environments.
- More time-consuming to produce than low-fidelity prototyping.

High-Fidelity Prototyping

Overview on Tools

For Example

- Microsoft Visio, PowerPoint
- **MS Expression Blend**
- **Axure Pro**
- iRise Studioj



MS Visio

MS Expression Blend

Axure Pro

Creating High-Fidelity Prototyping (using Powerpoint)

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Birthday 01 Jan 1980

Gender Female Male

Height

Email

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Creating High-Fidelity Prototyping(Using HTML, Java Script,css)

Advantages of Low-Fidelity Prototyping

- Low-fidelity representations, such as sketches, differ from the final product in interaction design, visual appearance, and/or level of details. The method is quick & cheap which encourage iterative design idea tryouts between/during usability tests.

- Quick Low-fidelity tests allows designers and users to focus on high-level interaction design and information architecture, rather than on details or visual style.

Advantages of High-Fidelity Prototyping

- High-fidelity prototypes offer more realistic interactions than low-fidelity.
- Better at conveying the range of design possibilities.
- User-driven.

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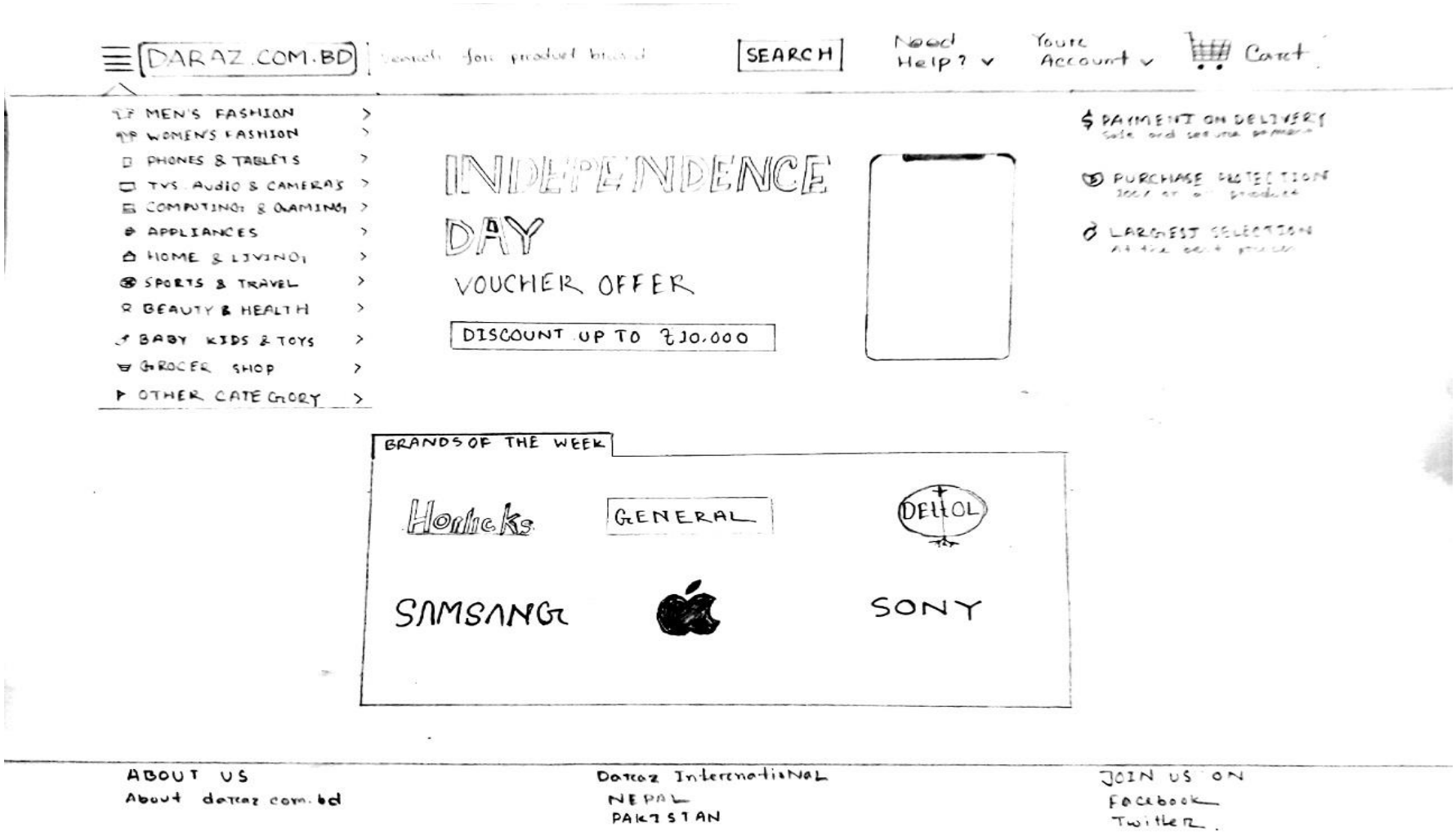
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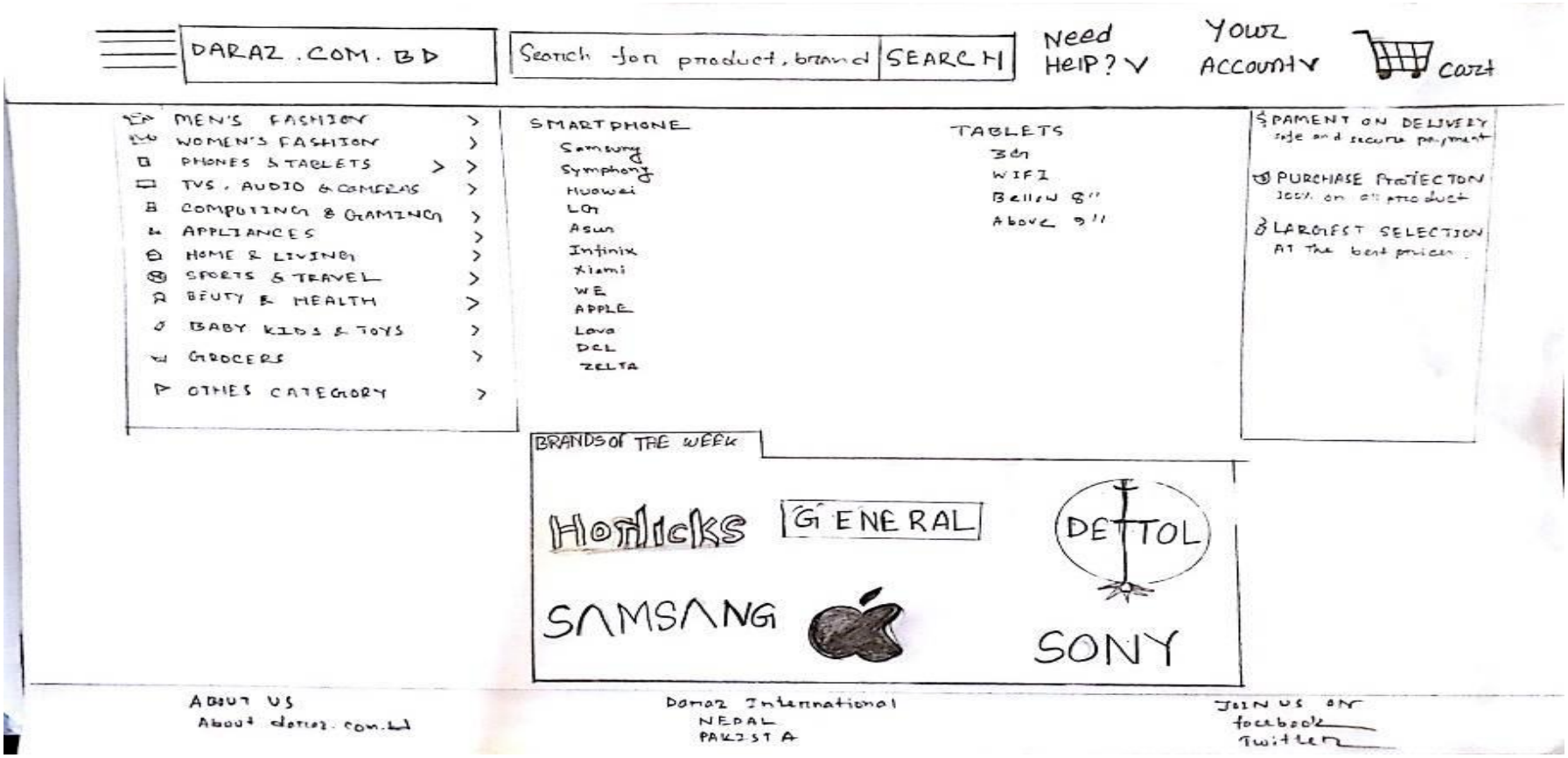
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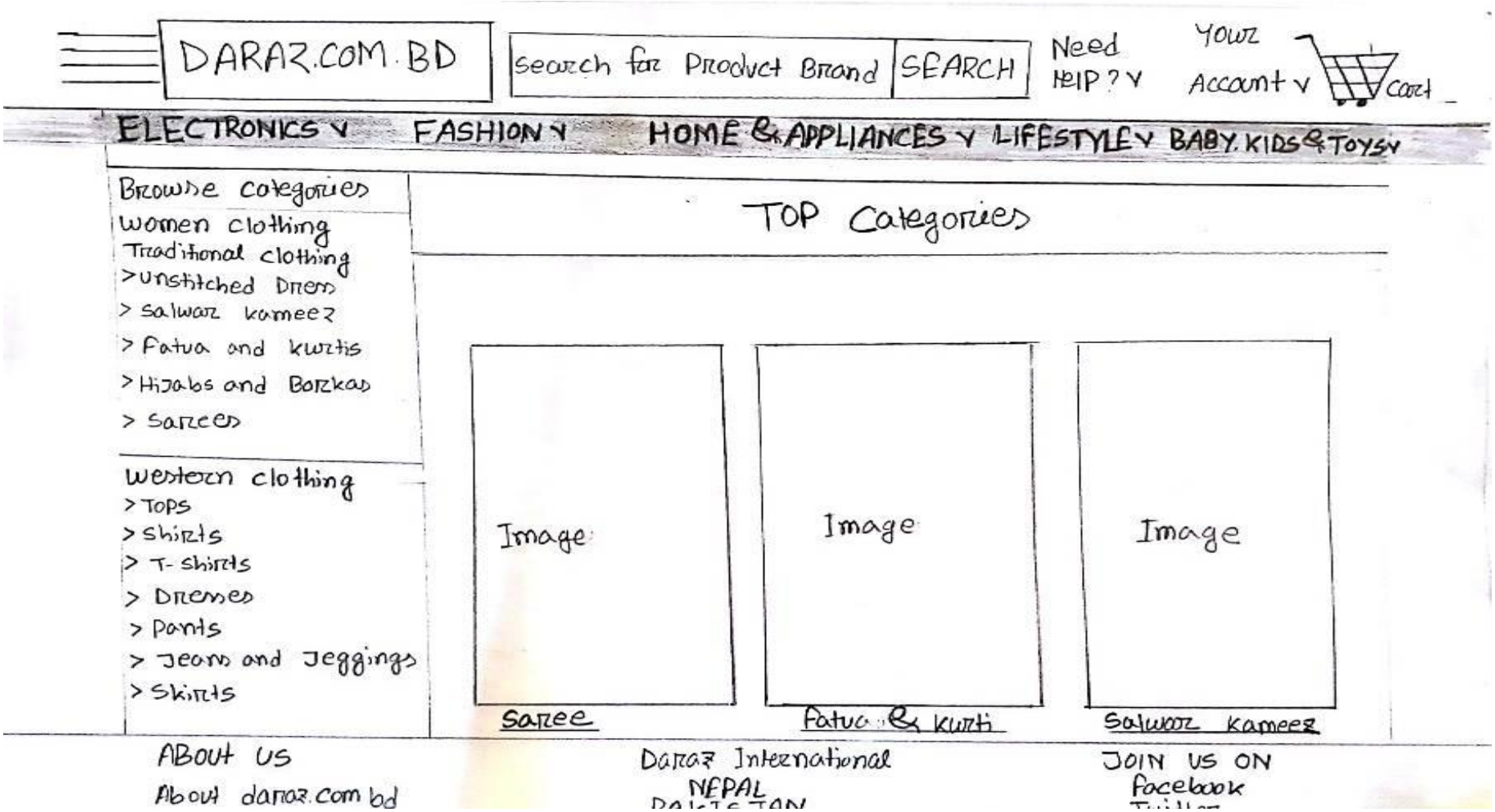
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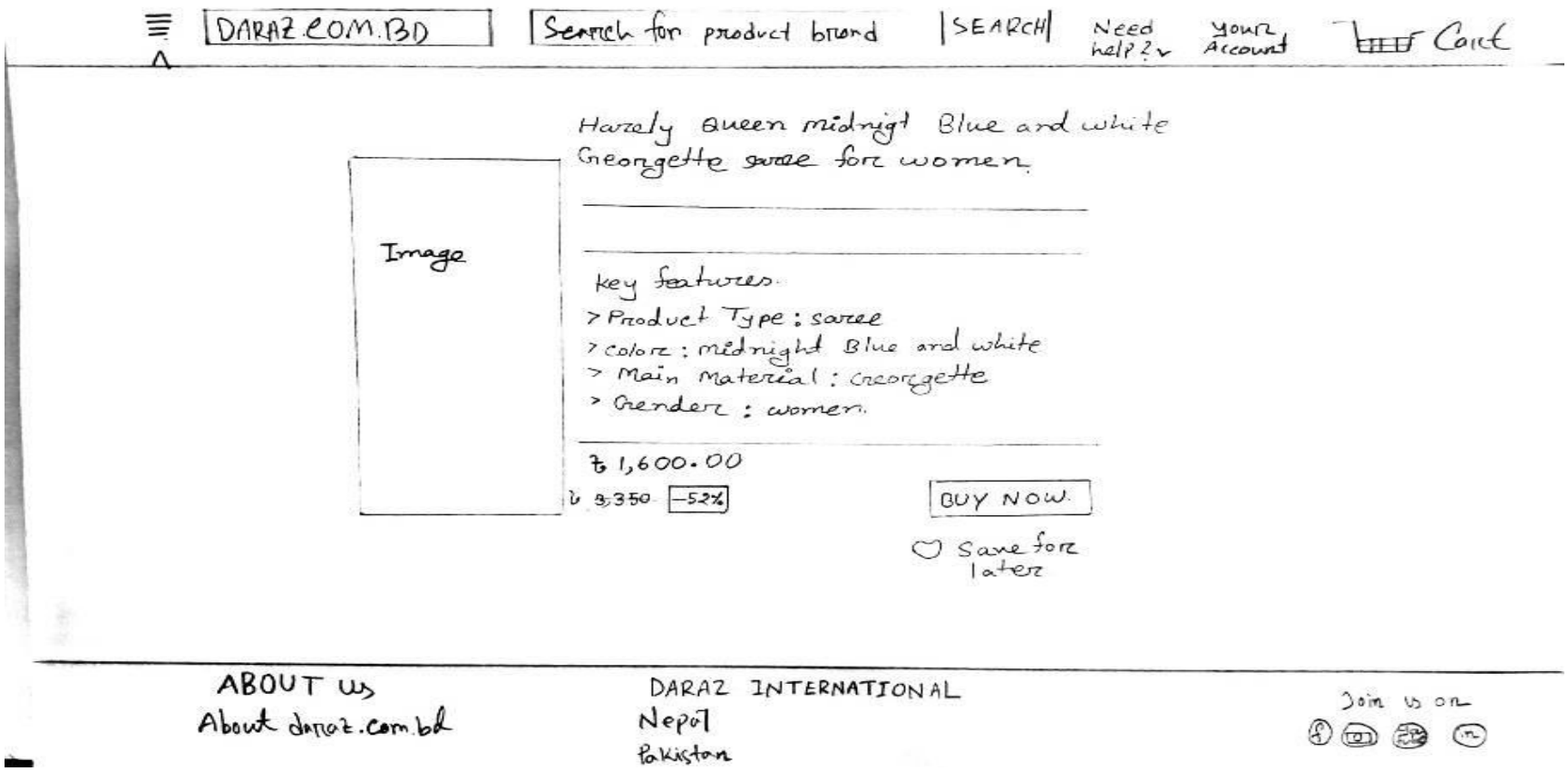

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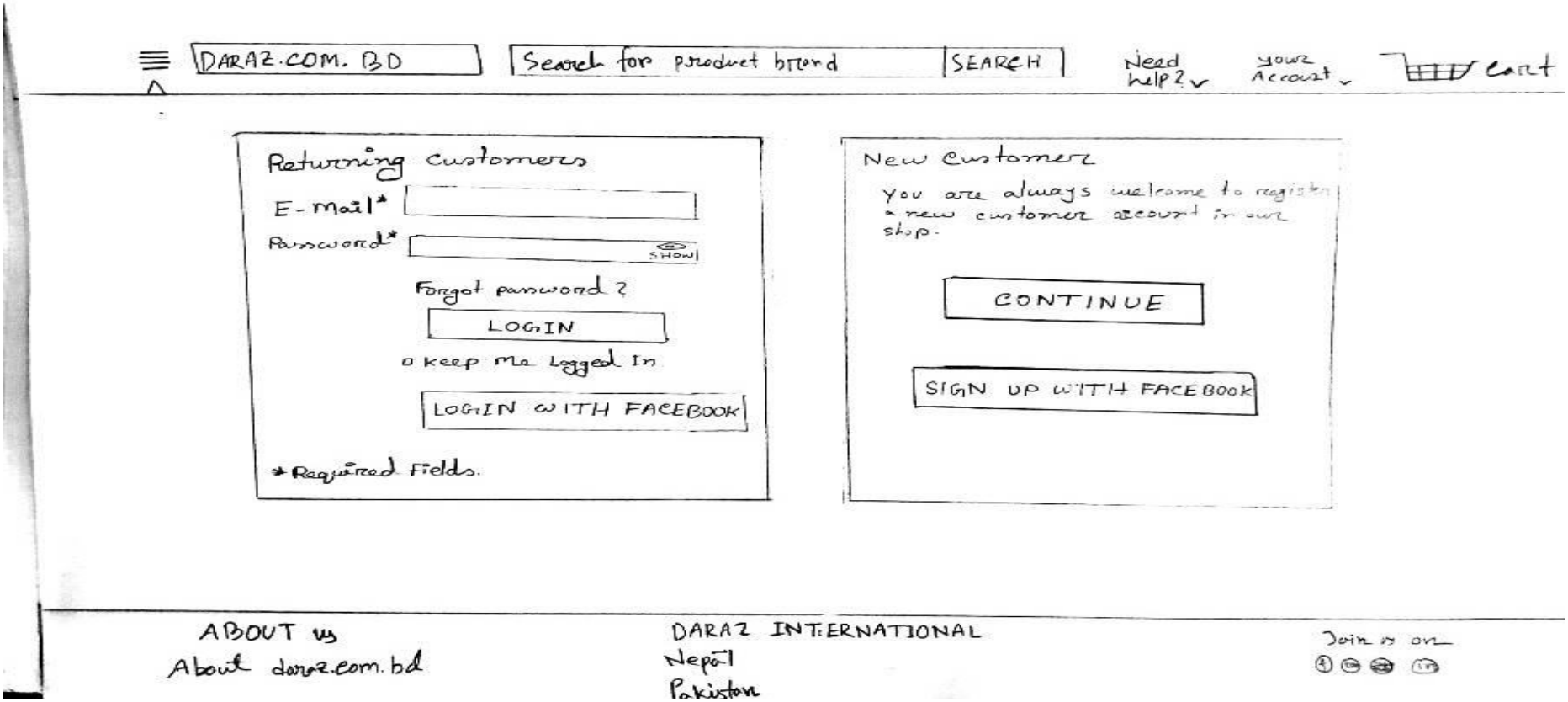
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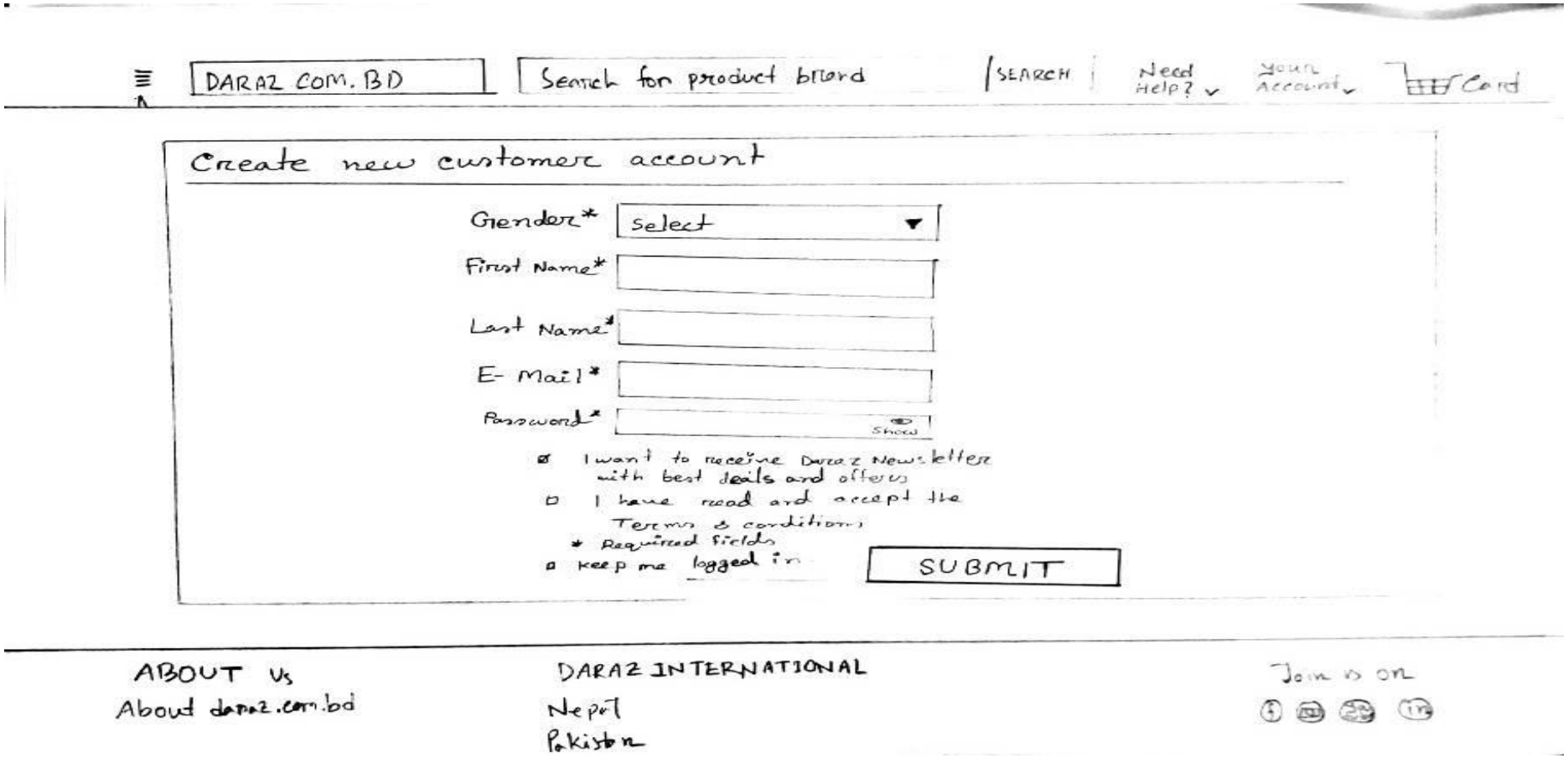
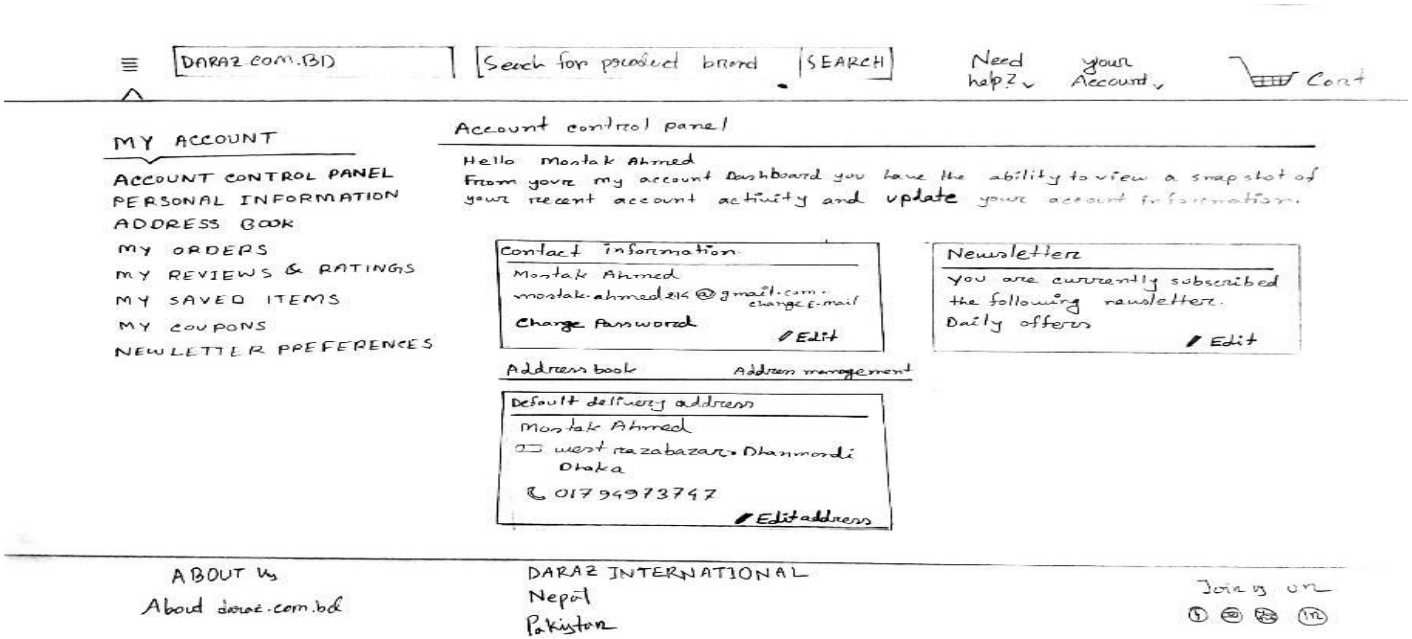


Control panel



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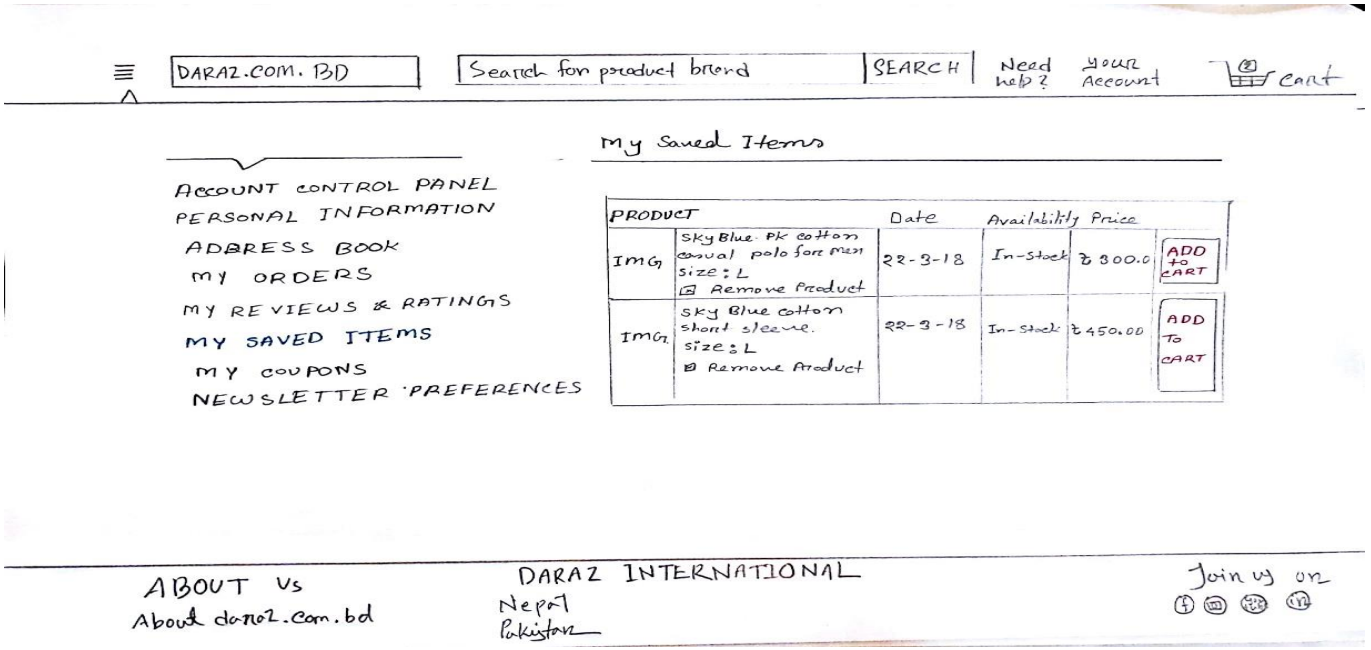
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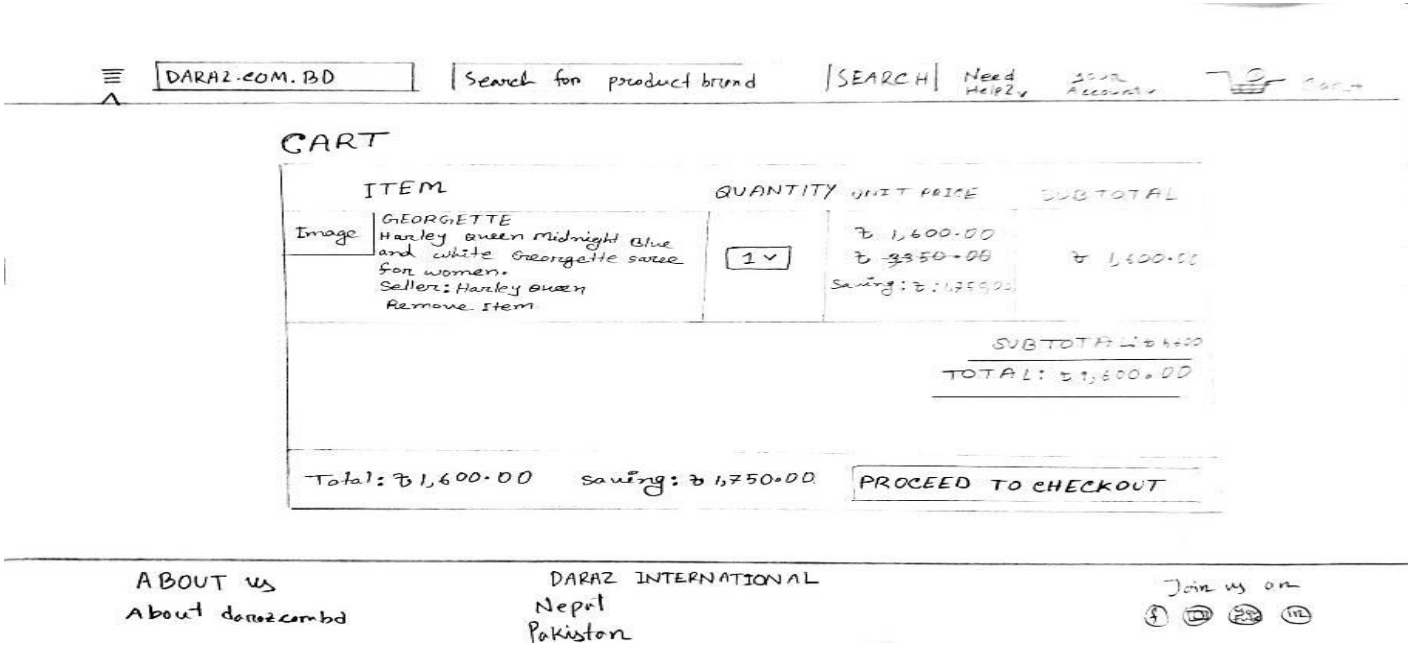
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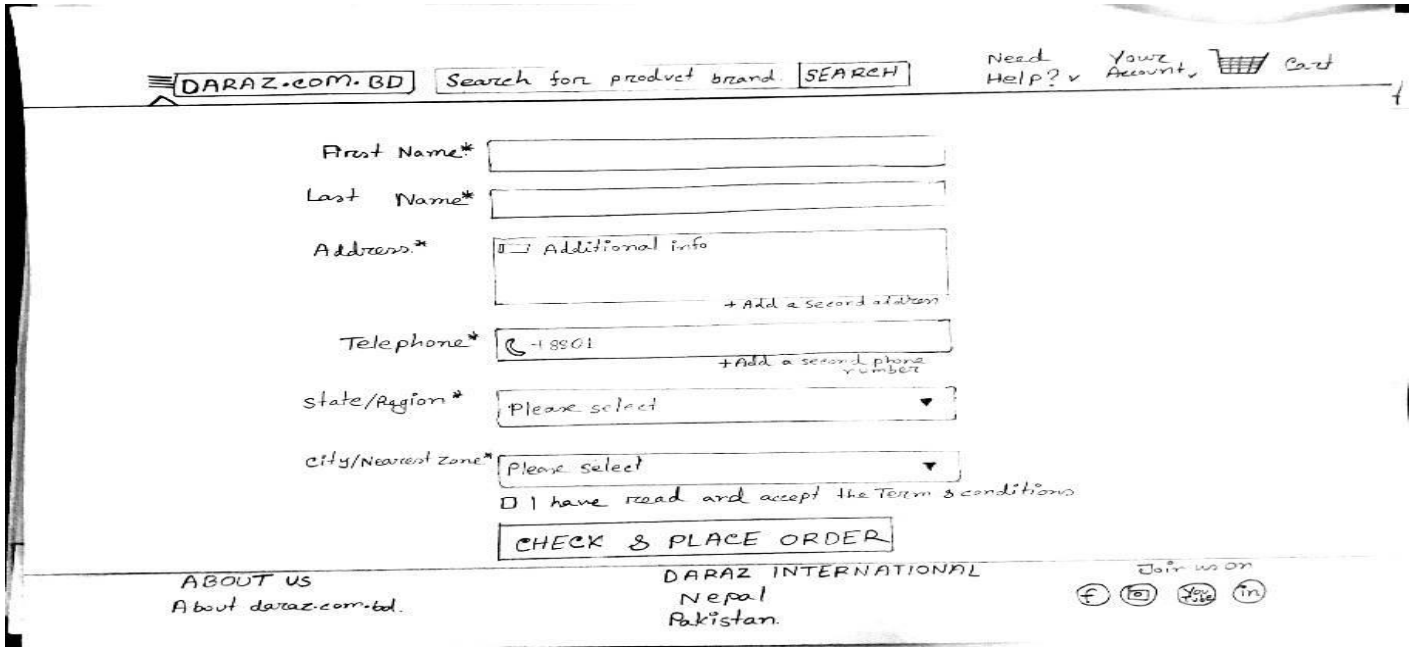
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1. Software Engineering by Ian Sommerville, 9th edition, Addison-Wesley, 2011
2. Software Engineering A practitioner's Approach by Roger S. Pressman, 7th edition, McGraw Hill, 2010
3. Norman, D.A. 1988. The Psychology of everyday things. Basic Books.
4. Snyder C. 2003. Paper prototyping. Morgan Kaufmann.
5. Preece, Rogers, Sharp. 2002. Interaction Design beyond human-computer interaction.

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