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# Graphical User Interface

## Chapter Three - part1

### Phases of Interface Design

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# Chapter Description

- **Aims**
  - To Understand the user interface design process.
  - To identify the components of GUI.
  - To identify the roles of use GUI components to build a good GUI.
- **Expected Outcomes**
  - Understand the user interface design process.
  - Able to design a good GUI.



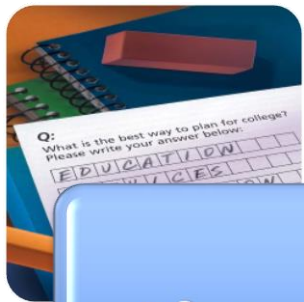
- **References**

The Essential Guide to User Interface Design, Third Edition,  
Wilbert O. Galitz, Wiley Publishing Inc.

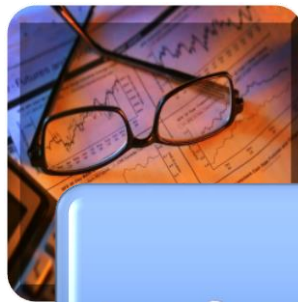
# Chapter content

- Contextual enquiry
- Analysis
- Design
- Construction Interface/ Prototyping
- Usability Testing
- Iterate/refine design
- Develop – Writing code
- Polish – review all

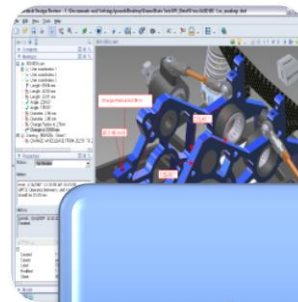
# General Structure



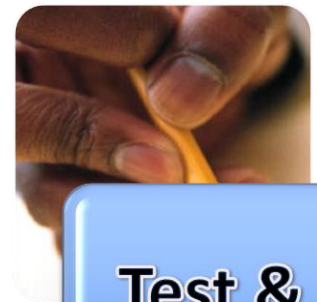
**Plan**



**Analyze**



**Design**



**Test &  
Refine**

# Contextual enquiry (CE)

Contextual inquiry is basically a structured field interviewing method, based on a few core principles that differentiate this method from plain, journalistic interviewing. Contextual inquiry is more a discovery process than an evaluative process; more like learning than testing.

(James Hom)



Contextual enquiry is a technique for examining and understanding users and their workplace, tasks, issues and preferences. It can be used to produce user needs analyses and task analyses, and feeds directly into design.

(Gerry Gaffney)

# When is CE appropriate?

- CE is appropriate whenever you need to develop or communicate an understanding of the users of an existing or proposed system.



# Analysis

- A process in problem solving techniques.

- Many tools can be used



## Appreciation

- Extracting All Most Information From Facts



## Drill Down

- Breaking Problems Down into Manageable Part



## SWOT

- Analyzing Your Strengths, Weaknesses, Opportunities & Threats

# A hands-on exercise...

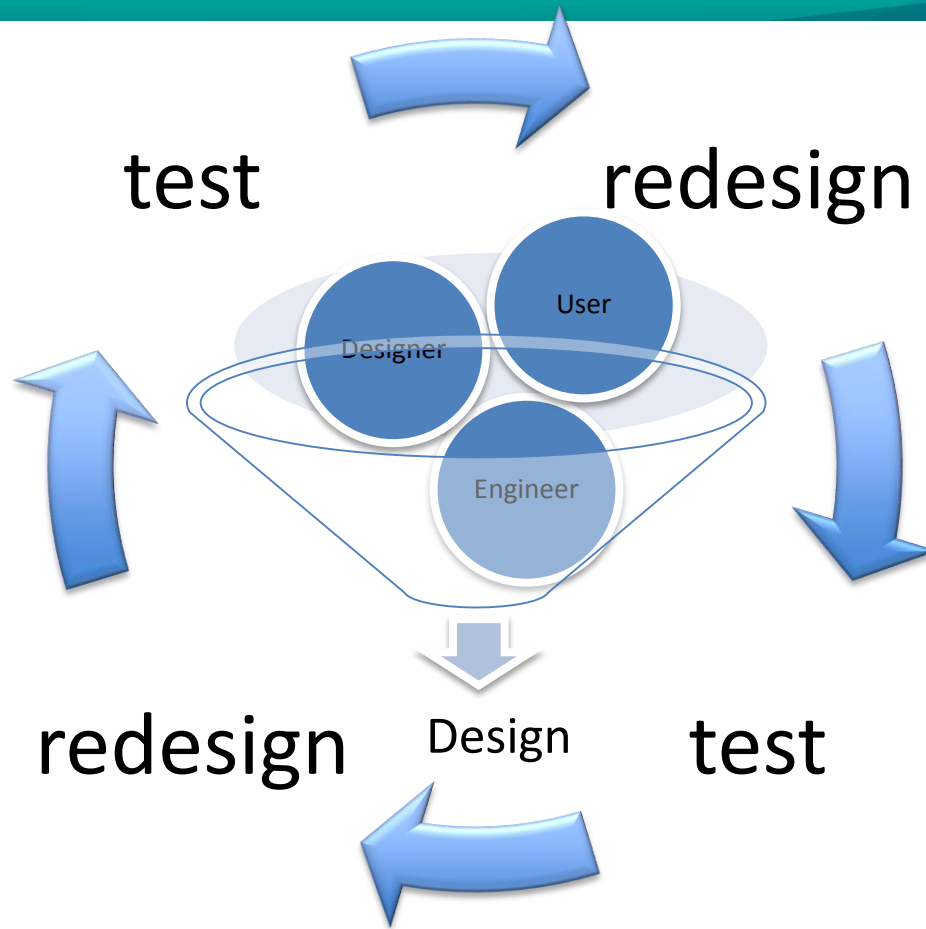
- Let say you have been offered with two different jobs,
  - One with multinational company with big salary and need to work abroad.
  - One with small local company with moderate salary and most of the time you just work in your office.
- How to decide?



# Usability Testing

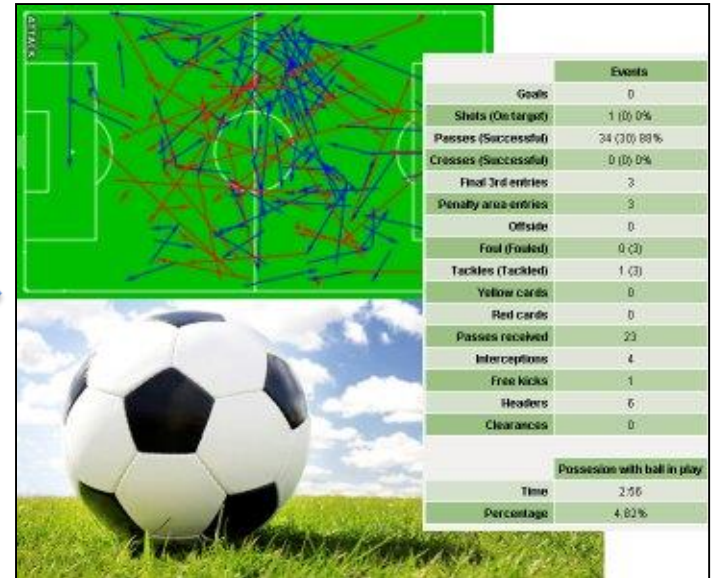
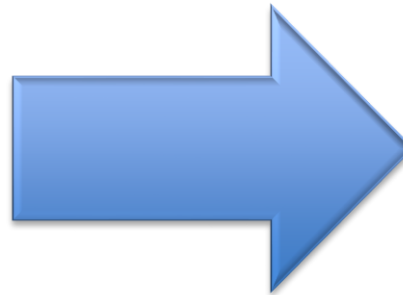
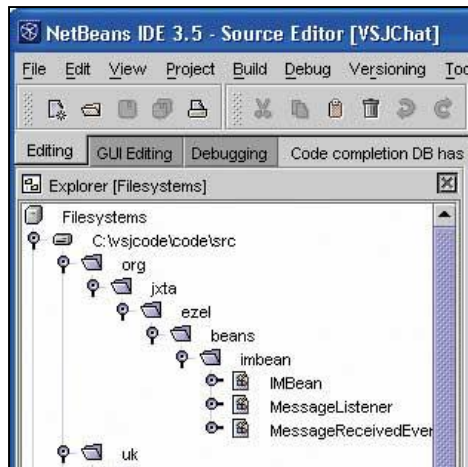
- Recall your second lecture!!!
- Usability measures the **quality of a user's experience** when **interacting with a product or system**—whether a Web site, a software application, mobile technology, or any user-operated device.

# Iterate/refine design



# Develop – Writing code

```
1 <!DOCTYPE HTML PUBLIC "-//W3C//DTD
2 "http://www.w3.org/TR/html4/str1
3 <html>
4 <head>
5 <title>Example</title>
6 <link rel="stylesheet" href="s
7 </head>
8 <body>
9 <div id="header">
10 <h1><a href="." title="Back
11 </div>
12 <div id="toolbar">
13 <span class="left">Today <sp
14 <span class="right">
15 <span id="time">&nbsp;</sp
16 <select id="timezone">
17 <option value="-12">(GMT
18 <option value="-11">(GMT
```



# Further readings:

- <http://www.deyalexander.com/resources/uxd/contextual-inquiry.html>
- [http://www.mindtools.com/pages/article/newTMC\\_05.htm](http://www.mindtools.com/pages/article/newTMC_05.htm)