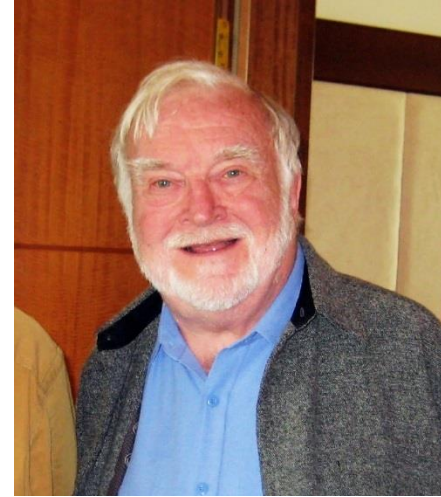


COMP08035 Computer Games Design

Week 06 Lecture - Cognitive Flow And Creating the User Experience



Cognitive Flow



- Mihaly Csikszentmihalyi

(mee-hal-yee cheek-sent-mee-hal-yee)

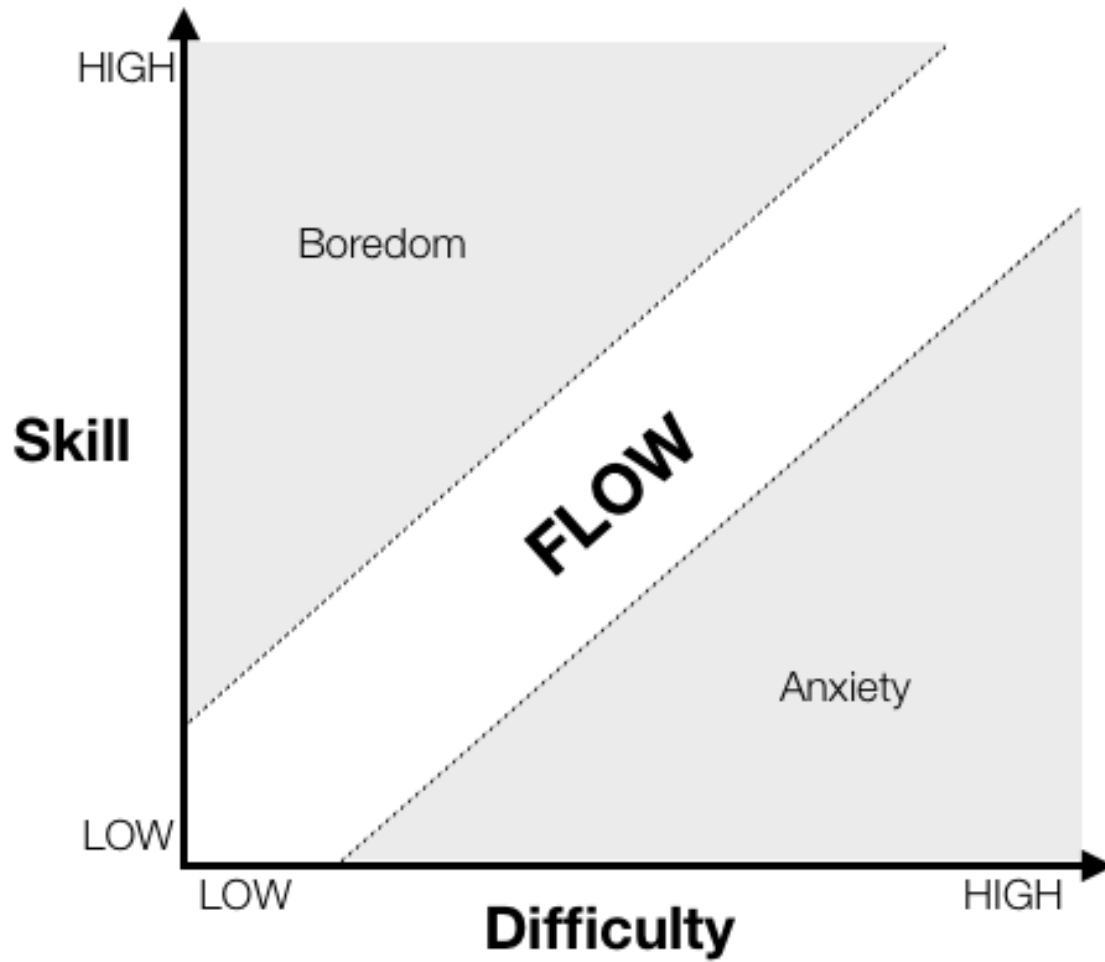
Csikszentmihalyi, M. (2009) Flow: The psychology of optimal experience. Nachdr. New York: Harper [and] Row.

Cognitive Flow



- You sit down, ready to get in a few minutes of gaming.
- Hours pass and you suddenly become aware that you're making ridiculous faces and moving like a contortionist while trying to reach that new high score.

Cognitive Flow

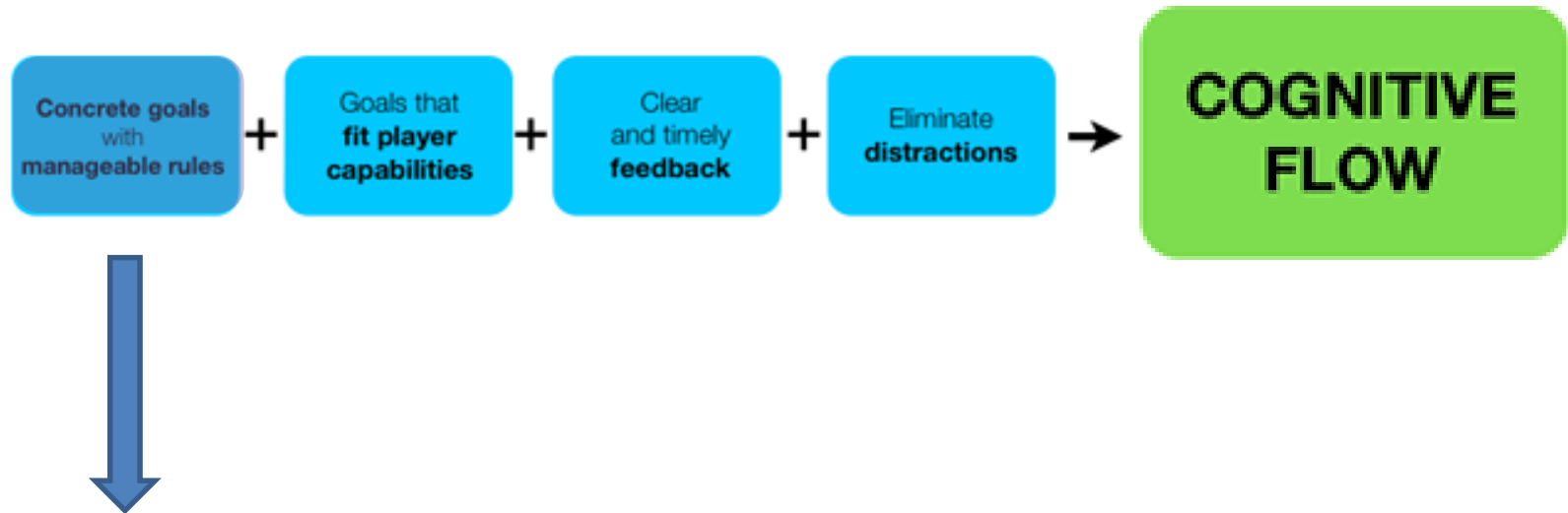


Cognitive Flow

- Extreme focus on a task.
- A sense of active control.
- Merging of action and awareness.
- Loss of self-awareness.
- Distortion of the experience of time.
- The experience of the task being the only necessary justification for continuing it.

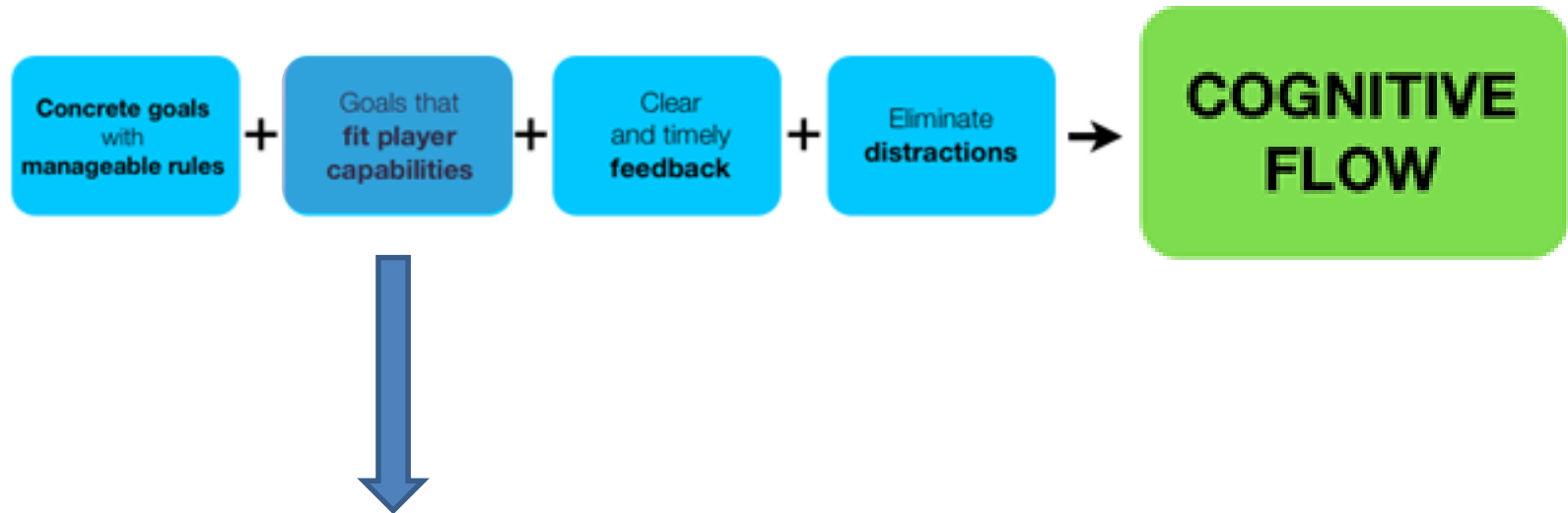


Cognitive Flow



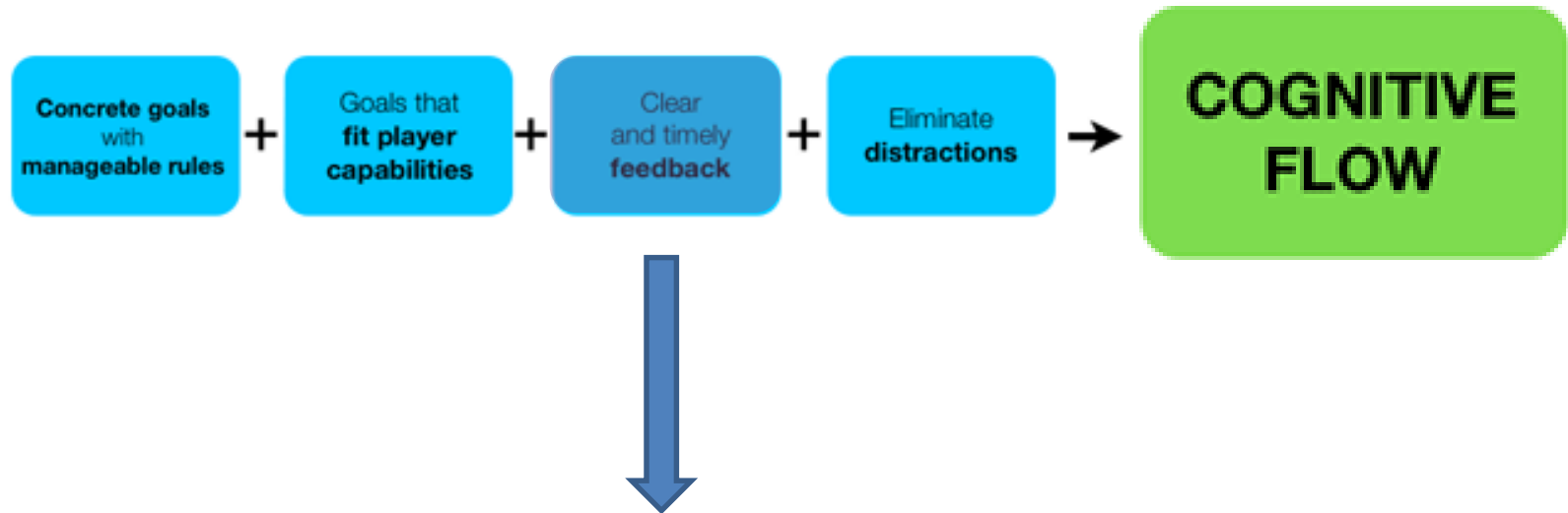
1. Games should have concrete goals with manageable rules.

Cognitive Flow



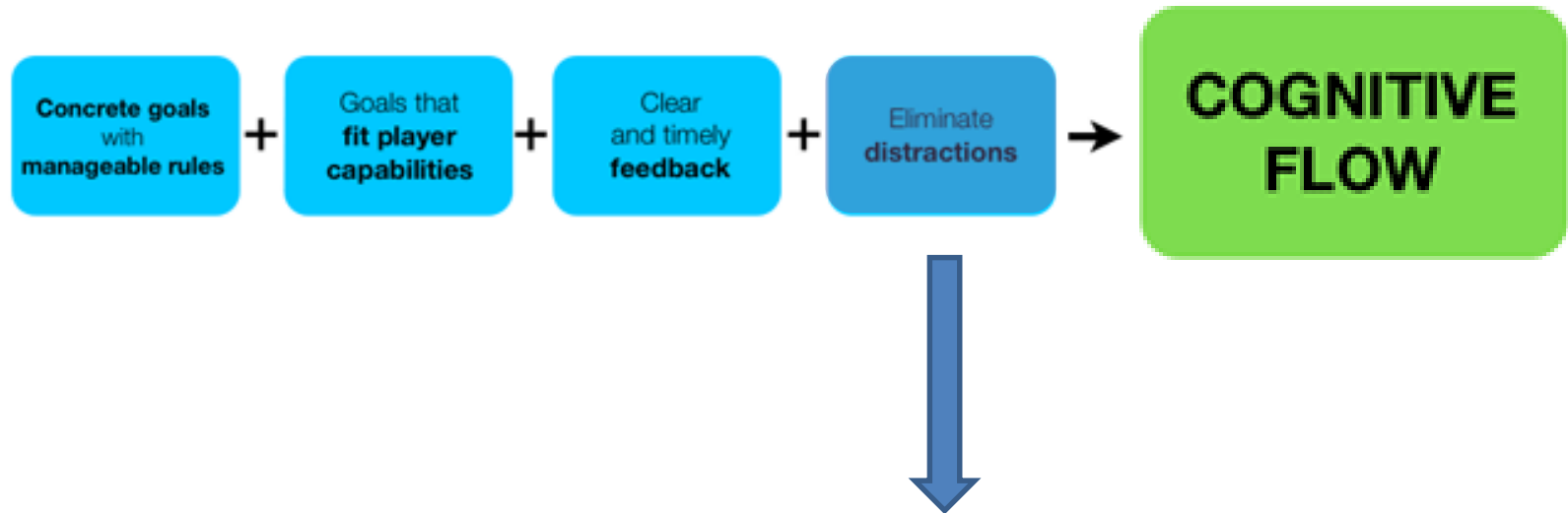
1. Games should have concrete goals with manageable rules.
2. Games should only demand actions that fit within a player's capabilities.

Cognitive Flow



1. Games should have concrete goals with manageable rules.
2. Games should only demand actions that fit within a player's capabilities.
3. Games should give clear and timely feedback on player performance.

Cognitive Flow



1. Games should have concrete goals with manageable rules.
2. Games should only demand actions that fit within a player's capabilities.
3. Games should give clear and timely feedback on player performance.
4. Games should remove any extraneous information that inhibits concentration.

The User Experience

- The total package experienced by the player when he/she plays the game
- Combination of three distinct areas of the design:
 - Visual element
 - Audio element
 - Interactive element



Visual Element



- This is the “look” part of “look and feel”
- Need to consider the overall impact of the artwork
- How should it combine and mesh with other elements of the game design?
- Does the player get an overall consistent picture of the game world?

Audio Element

- Just as important as other elements
- Creates the atmosphere of the game world
- Provides feedback to the player



Interactive Element

- How the player interacts with the game
- The “feel” part of the game’s “look and feel”
- Concerned with the navigational pathways through the game and the physical controller setup



User Interface

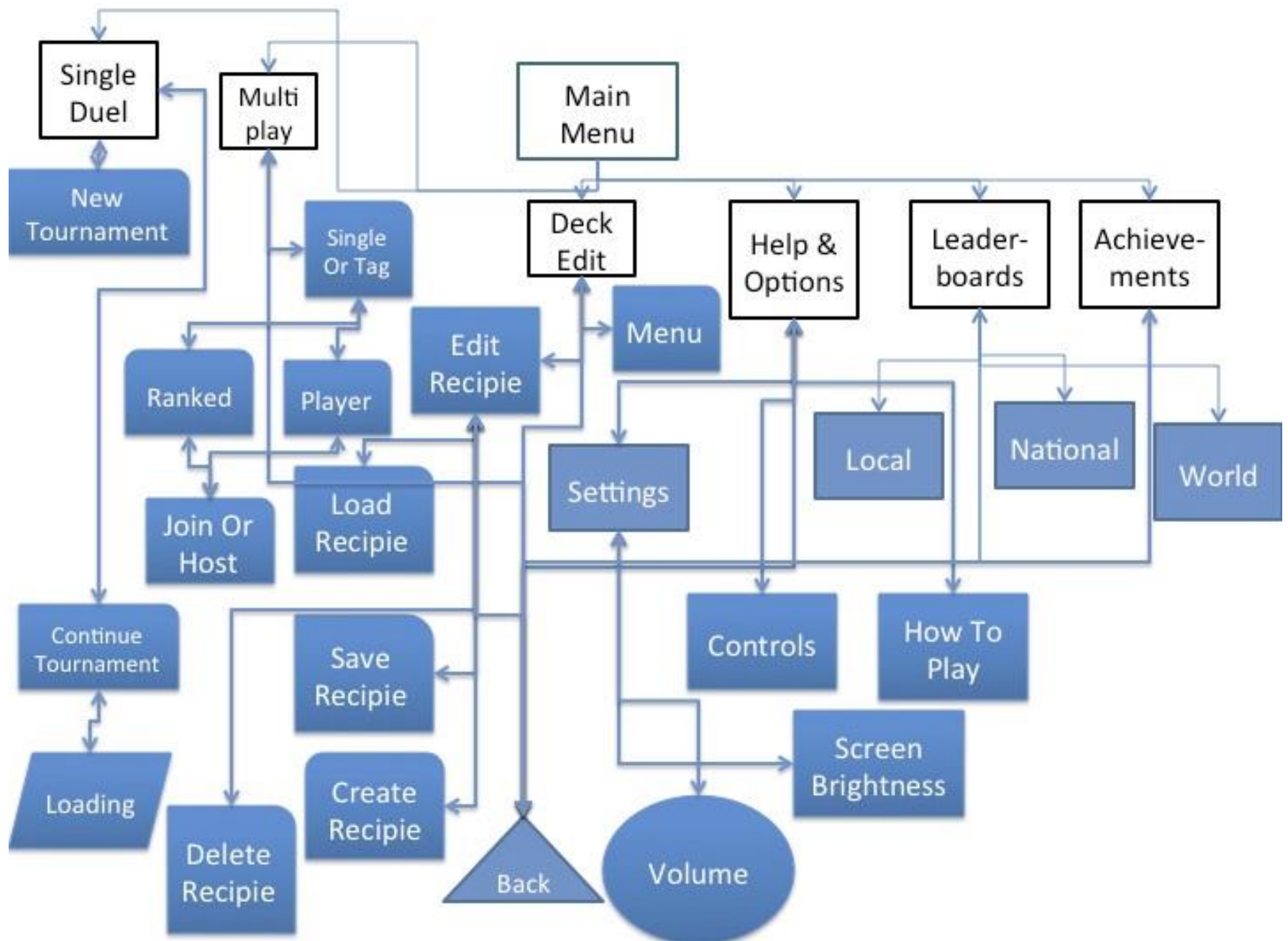
- Must be designed to immerse the player in the world of the game
- At least as important as gameplay
- Challenging for game designers
- The user interface can make or break your game



User Interface - Navigation

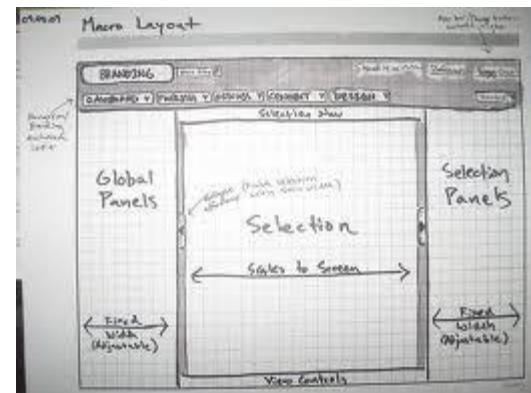
- Navigation:
 - designing good navigation is complex and difficult
 - Rough out design on paper, then create a simple prototype using e.g. Adobe Flash
 - Ask others to test the prototype interface before finalising the design





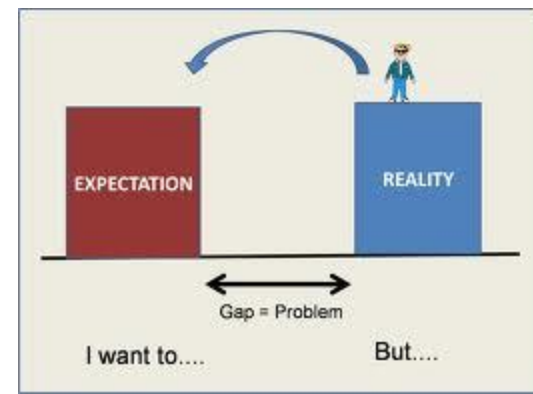
User Interface – Screen Layout

- Need to balance use of screen area with usability and accessibility
- Decide on screen layouts at an early stage and stick with them
- Players hate inconsistency in screen layouts
- KISS principle – “Keep it simple, stupid!”



User Interface – Meeting Expectations

- User interface is not the place to be original!
- Stick to what the player knows and is used to
- Players simply won't dedicate any time or effort to figure out a new unfamiliar interface
- If you are determined to include a new style of interface, let the player choose a “classic” interface instead



User Interface – Hardware Considerations

- Important element of game design
- Need to be aware of the capabilities and limitations of your target platform
- Controllers or other interface devices are particularly important



User Interface

- Functional aspects far more important than aesthetic aspects
- As games have become more complex, so have user interfaces
- Main function of a user interface is to allow the player to play the game
- Needs to be very carefully planned and documented during design





User Experience Questions

Some questions about your game:

1. Roughly sketch out the major elements of the shell interface
2. Do the same for the in-game interface – include all gameplay modes
3. Create a flowchart showing how the gameplay modes change, and what events cause the change



User Experience Questions

Some questions about your game:

4. For each gameplay mode:

- Create its screen layout
- Define what will happen when each controller/keyboard button is pressed and when an object in the game world is selected



User Experience Questions

Some questions about your game:

5. Does the function of buttons on the controller change within a mode? If so, how does the player know?
6. How does avatar behaviour map to input devices?
7. Are you complying with player expectations within the genre?



User Experience Questions

Some questions about your game:

8. Does the game include menus? What is the menu structure?
9. Is there text on-screen? Does it need to be localised?
10. What icons will you use? Are they easily identifiable? Are they culturally neutral?



User Experience Questions

Some questions about your game:

11. What music and sound effects will you use?

How will you ensure that they are consistent with visual and interactive elements?

Practical

- Work on researching and writing your Game Design Document
- Record progress in your blogs.



Getting Practical