

Chapter 2.2

Iterative, Evolutionary, and Agile
A Continuation

2.4 Example Iterative and Evolutionary Analysis and Design?

- Excellent example. Many details will be forthcoming to explain all this.
- Overview of a simple example on 20 iterations (over a year) project:
 1. **Before the first iteration**, hold an **initial requirements workshop** with client and senior developers. In the **UP** this is the **Inception Phase** (covered in detail in next lectures)
 - o Define the **project objectives**;
 - o Do **high-level requirements analysis** by identifying **use cases** (say 30 are found) and features; (**use cases covered in a later chapter**) **30 is a large number!!!!** (High level: naming; short description; not much more in high level (façade) use cases). **Place holders....**
 - o **Study problem domain....**
 - o **Identify non-functional requirements** (look and feel, efficiency etc.)
 - o These are typically ‘quality factors’ such as reliability, efficiency, scalability, learnability, maintainability, security, correctness, etc. To be covered later)

2.4 Example Iterative and Evolutionary Analysis and Design?

- Before the first iteration – **continuing.....**
 - Pick the 10% of the use cases with a blending of:
 - **Architecturally Significant; (require significant work!! Design, build, test...)**
 - **High marketing value; high business value; core needs**
 - **High risk Address these first!!**
 - this leads to say parts of three use cases: say UC2, UC11 and UC14;
Recognize that these are likely scenarios WITHIN each of these use cases and not the entire use case....
 - Do a **detailed analysis** of the functional and non-functional requirements for these three use cases (or scenarios from the use cases); **Note perhaps 10% of use cases are now significantly analyzed. 90% not.**
 - Review everything with everybody;
- **This is done before we actually START iteration one. This is the iteration planning for iteration 1, which will take place in the Elaboration Phase.**
- **This (and much more – vision docs, risks lists, business rules, etc.) is done during Inception. Sometimes, we say that there is one iteration in Inception. Arguable.**