# **DAC627 Seminar 3: The ICONIX Process**

The ICONIX Process is software modelling process which fits well into Agile frameworks. The process should inform and shape the way in which a development team approaches each iteration of development.

The basis for these seminar will be the set of texts “Use Case Driven Object Modelling with UML: Theory & Practice” by Doug Rosenberg and Matt Stephens, “Applying UML and Patterns” by Craig Larman, and possibly “Writing Effective Use Cases” by Alistair Cockburn. There are several online resources available of varying quality, so be wary.

Seminars should cover ***in depth***:

* An introduction to or history of the topic. When was it created, by whom?
* What is need for this topic or what caused its creation?
* Why it's important for software developers.
* Relevance of the topic to the unit project, and how it has been or will be applied.

Guidance:

* Try to reduce any technical jargon into common language all students will understand, or clearly define all subject-specific terms.
* Try to embed examples into your presentation. For example, if you are discussing representation of user achievements, show how these are evident from your example.
* When you’re describing concepts, try to represent them using graphics – this saves you having to have slides with lots of words on them.

## Topic A: ICONIX Process Phases

The process is divided into distinct phases, each of which fits into the process alongside a distinct set of activities, outputs and milestones.

**This seminar will introduce ICONIX and provide an overview of the process.**

The team should consider the following points when preparing the presentation:

* What ICONIX is the purpose/mission of ICONIX
* What are the ICONIX phases
* How does ICONIX relate to Behavior Driven Development
* The goals of each phase and milestone requirements to proceed into the next
* How the phases work with Agile sprints
* Identify the primary tools of the ICONIX process

Seminar A should lead into Seminar B with minimal overlap.

## Topic B: ICONIX Process Practices and Artefacts

The ICONIX process relies on several tools and documents to capture information and communicate technical design. They are appropriate to each phase, and help ensure the phase milestone is met, allowing progression into the next phase

**This seminar will discuss the role of various modelling tools and artifacts within the context of the ICONIX process.**

The team should consider the following points when preparing the presentation:

* What are the practices and artifacts used within each phase, and what is their purpose
* The benefits of each tool in the bigger picture
* What does it mean to "disambiguate classes"
* What is the relationship to UML

Use Cases, User Stories and the Expanded Use Case

The Use Case is an important first stage in the ICONIX process and is a fundamental feature of all Agile Frameworks, not just SCRUM.

This seminar will discuss the role of the text based Use Case and its variant the User Story within the context of the ICONIX process. To be truly useful, the use case must be a relevant and informative document.

The basis for this seminar will be the set texts “Use Case Driven Object Modelling with UML: Theory & Practice” by Doug Rosenberg and Matt Stephens and (although there are minor errors) “Applying UML and Patterns” by Craig Larman and possibly “Writing Effective Use Cases” by Alistair Cockburn.

The team should consider the following points when preparing the presentation:

* Primary and Secondary Use Cases; Essential and Optional Use Cases
* The Use Case as an expression of functional achievement on behalf of the user.
* The User Story as a complete description of a user-based functional scenario.
* The Expanded Use Case as “a contract for behavior”.

Try to embed examples into your presentation. For example, if you are discussing representation of user achievements, show how these are evident from your example.

When you’re describing concepts, try to represent them using graphics – this saves you having to have slides with lots of words on them.

Topic B: ICONIX Process Tools and Artefacts

ICONIX 1: Use Case Diagrams, in relation to User Stories and the Expanded Use Case

The Use Case Diagram is an important stage in the ICONIX process and is a fundamental feature of all Agile Frameworks, not just SCRUM.

This seminar will discuss the role of the Use Case Diagram within the context of the ICONIX process.

The basis for this seminar will be the set texts “Use Case Driven Object Modelling with UML: Theory & Practice” by Doug Rosenberg and Matt Stephens and (although there are minor errors) “Applying UML and Patterns” by Craig Larman and possibly “Writing Effective Use Cases” by Alistair Cockburn.

The team should consider the following points when preparing the presentation:

* Notation; The elements of a use case diagram
* Primary and Secondary Use Cases; Essential and Optional Use Cases
* The Use Case Diagram as a functional description of a system and its major processes.
* The Use Case as an expression of functional achievement on behalf of the user.

Try to embed examples into your presentation. For example, if you are discussing representation of user achievements, show how these are evident from your example.

When you’re describing concepts, try to represent them using graphics – this saves you having to have slides with lots of words on them.