Object Oriented Analysis & Design using UML 2

Course Background:
The object-oriented (OO) development of software systems has undergone a dramatic evolution in the last couple of years. This is mainly due to the introduction of a single common language for visualizing and documenting software design. Over the past decade, under the supervision of The Object Management Group (OMG), the Unified Modeling Language (UML) has developed into a design-language standard that is generally accepted and widely used.

Course Benefits:
This course is aimed at providing basic working knowledge of the UML 2 notations as well as insight in the design goals and usage of these notations. After this workshop, participants will be able to:
- understand the underlying modeling methods
- understand a generic OO development approach and the corresponding documentation structure
- apply the basic OO concepts to the development of embedded systems and define the abstractions needed
- analyze a development problem and deliver diagrams and descriptions to construct a software solution
- oversee the problems and issues that have to be dealt with in an architectural design and implementation

Who will benefit from this course?

- Software developers
- Software engineers

Pre-requisites:
The participants will need to have an initial understanding of object-oriented programming languages, like C++ or Java.

Course Contents:
Course duration: 5 days

<table>
<thead>
<tr>
<th>Introduction</th>
<th>Introduction to OO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UML Overview</td>
</tr>
<tr>
<td></td>
<td>Demo of a model documented in UML, according to the Unified Process</td>
</tr>
<tr>
<td>UML Notations and problem analysis</td>
<td>Class and Object modeling</td>
</tr>
<tr>
<td></td>
<td>Use-Case modeling</td>
</tr>
<tr>
<td></td>
<td>Object Interaction modeling</td>
</tr>
<tr>
<td></td>
<td>Object Behavior modeling</td>
</tr>
<tr>
<td>Workshop (1 day)</td>
<td>Carrying out the analysis of an example problem</td>
</tr>
<tr>
<td>Architecture</td>
<td>From analysis to design</td>
</tr>
<tr>
<td></td>
<td>Patterns and architecture</td>
</tr>
</tbody>
</table>

Course Format:
Teaching Method: Lectures, small exercises and workshop
Teaching Material: Workbook, CD containing the UML specification document in PDF.
Language: English or Dutch
Instructor: This course is delivered by a Certified UML Advanced professional

The lectures will be followed by small exercises to practice modeling with UML and get a working knowledge of basic notations. The emphasis is on obtaining a good mental separation between analysis of a problem and construction of a solution. The workshop aims at providing a good understanding of the relationships between the various models as well as a feeling for heuristics to obtain effective object decompositions.

Additional Options:
Please indicate any desired options when signing up for this course, or contact your account manager.

Terms and conditions:
The standard terms and conditions of Mithun Training & Consultancy are applicable. We will send you a copy on request.