

Activity Chart

SI No.	Activity	Modeling Steps
0.	Use case Diagram	<p>Select Usecase View Main and create Actors & Use cases.</p> <p>Select Usecase View, Right click and select new Usecase diagram and rename it as Package diagram.</p> <p>Dbl click on the same and create packages in the diagrams.</p> <p>Drag Use cases & Actors respectively.</p>
1.	<p>Architecture Analysis</p> <ul style="list-style-type: none"> ✓ Identify Patterns ✓ Define analysis mechanisms. ✓ Define key abstractions 	<p>Select Logical View, Right click and select new class diagram and rename the same as Architecture diagram.</p> <p>Dbl click on Architecture diagram and create Layers (Select Package , right click, open specification and select Stereotype Layer)</p> <p>Select Notes and document Architecture Mechanisms & Key Abstractions.</p> <p>Select Logical View, Right click and select new class diagram and rename the same as Realization diagram.</p> <p>Select the usecase to be realized from Usecase view, also create Usecase Realization by selecting Usecase Realization notation in the tool bar.</p>
2	<p>Use Case Analysis</p> <ul style="list-style-type: none"> ✓ Supplement use case descriptions ✓ Find classes and distribute behavior ✓ Describe responsibilities, attributes and associations, and qualify analysis mechanisms ✓ Unify analysis classes ✓ Insummary, develop analysis use-case realizations 	<p>Select Usecase to be realized, Right click and create new class diagram. Create Boundary, control & Entity classes.</p> <p>Select Usecase to be realized, Right click and create new Sequence diagram and rename it as basic flow and repeat the same for alternative flows.</p> <p>Right clk on the messages, select new operation option and add // responsibility.</p> <p>Select Sequence diagram and press Function key F5 and you would get collaboration diagram.</p> <p>Links in collaboration diagram results in relationship between classes. (This is manual step)</p>
3	Design Mechanisms	<p>Expand Arch Analysis Mechanism chart created in Arch Analysis phase by adding details in Design & Implementation Mechanism</p> <p>Select Design patterns. Load them if it is already there in your repositories.</p>

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4	Design Model ✓ Packages and their relationships, and their contents (now includes lower-level layers and packages) ✓ Subsystems, Interfaces, and their relationships ✓ Update Packages and subsystems to Layers.	Run the cloning Script . Select Design Package , Right click and create new class diagram and rename it as Package diagram Design. Dbl click and create Packages and group classes accordingly. Select Design package, Right click and create new class diagram and rename it as Subsystem diagram. Dbl click and create Packages, right clk and stereotype it as subsystem. Create interface class and connect with Subsystem using Realization relationships. Group packages & Subsystems into Layers.
5	Run time Architecture Identify Process & threads	
6	Describe Distribution Deployment diagram	
7	Use case design ✓ Define interactions between design objects, incorporating any architectural mechanisms ✓ Encapsulate Common Sub flows ✓ Refine Flow of Events description ✓ Unify classes and subsystems	Load Design patterns Update VOPC with the necessary design patterns Update Sequence diagrams by linking Design patterns Update VOPC, Sequence, and collaboration with the interfaces that you have identified in the Design Elements Module. Look for Consistency in Sequence diagram, if needed Simplify them.
8	Subsystem design. ✓ Distribute subsystem behavior to subsystem elements ✓ Document subsystem elements ✓ Describe subsystem dependencies	Select Subsystem diagram, Dbl clk on Subsystem and complete the design.
9	Class design ✓ Create initial design classes ✓ Define operations ✓ Define methods ✓ Define states ✓ Define attributes ✓ Define dependencies	Replace responsibilities by Operations. Complete by adding Signature, arguments and return types. Select attribute data types and specify signature. Specify Association, Aggregation, Composition relationships with multiplicities and roles defined.

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	✓ Define associations Define generalizations	Specify Inheritance and dependency relationships.
10	Database Design	Select Entity classes that have to be made persistent and group them in a package. Select Data Modeler option and create Data Model diagram. You can create Scripts (ddl or SQL from this model) and can also take the entities to Relational databases. Reverse Engineer an existing database and generate object Model.