

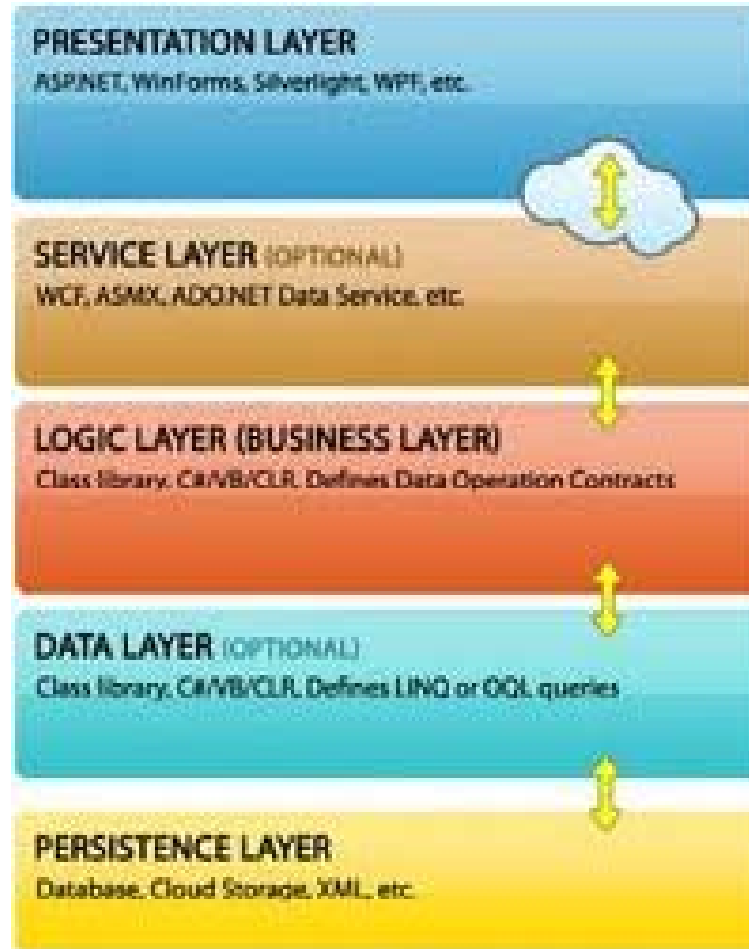


CPSC 875

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Ocarina

Tiered



Ocarina

- Compiler for AADL
- Code generation back ends
 - C
 - Ada
 - Petri nets
- Petri net code works with Tina, a petri net simulator

Criteria

- Requires a “complete” AADL model
- Requires that all processes be bound to a processor.
- Any state machines need an initial state

Location

- Ocarina Documentation
 - <http://download.tuxfamily.org/taste/snapshots/doc/ocarina-current.pdf> - includes AADL to petri net mapping
- TASTE Documentation
 - <http://download.tuxfamily.org/taste/snapshots/doc/taste-documentation-current.pdf>
- TASTE VM
 - http://taste.tuxfamily.org/wiki/index.php?title=Virtual_Machine

Tool chain

- OSATE
 - Create AADL architecture description
- Ocarina
 - Ocarina -g petri_nets -aadlv2 -f file1.aadl ... >output.txt
- Editor/Word Pad
 - Copy part of the buffer that starts with
 - net AADL_TO_TPN_GENERATED upto the next ~~~~~line
- Tina/nd.exe
 - Select New | .net
 - Edit | Paste
 - Use Step simulator to step through petri net
- First press RAND and then rewind before trying single step ">"

Simulator

- In the simulator read the names of the places as the tokens transit through them
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Here is what you are going to do:

- Security slides are at:
 - <http://www.softwarearchitecturebook.com/svn/main/slides/ppt/>
- Compile your architecture with ocarina
- Grab a picture of the petri net
- Use the simulator to step through the net
- Submit picture by 11:59 pm March 25th