CodeXL

File Edit View Debug Profile Tools Window Help

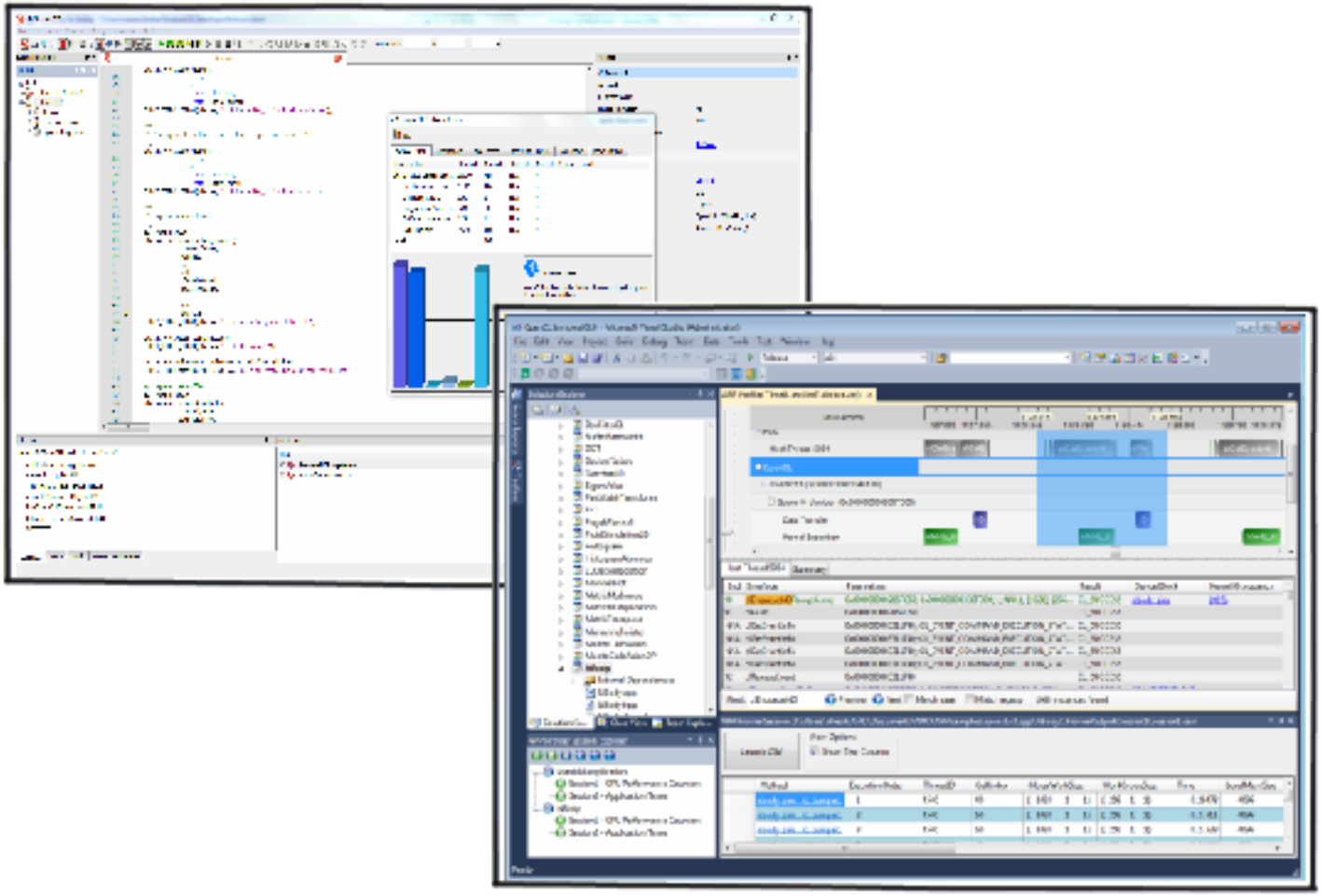
D P

CodeXL Welcome Screen

Create new Project

Open a Project

Load the Teapot sample



Recent Projects

DCT (Profile mode)

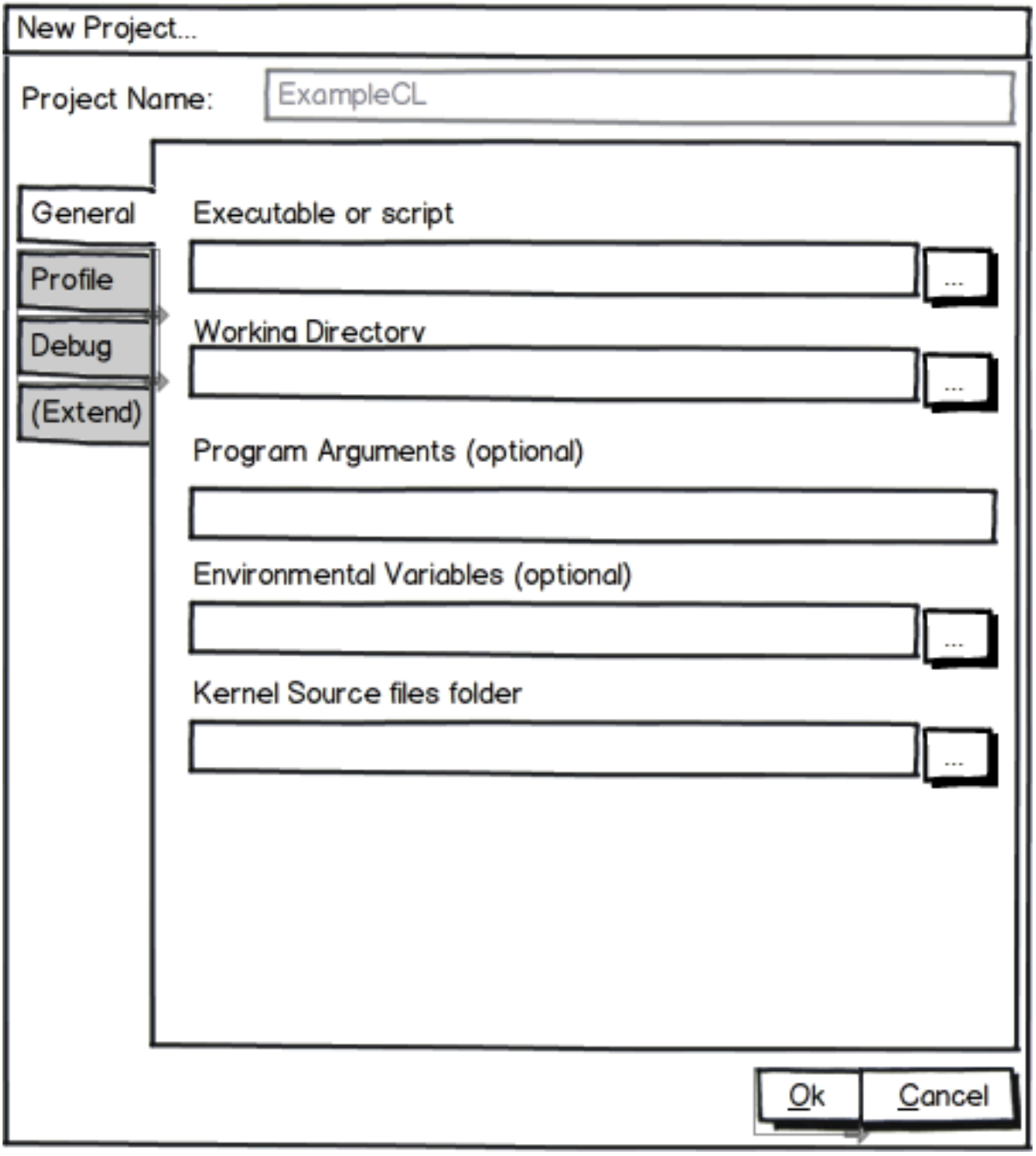
Mandelbrot (Debug mode)

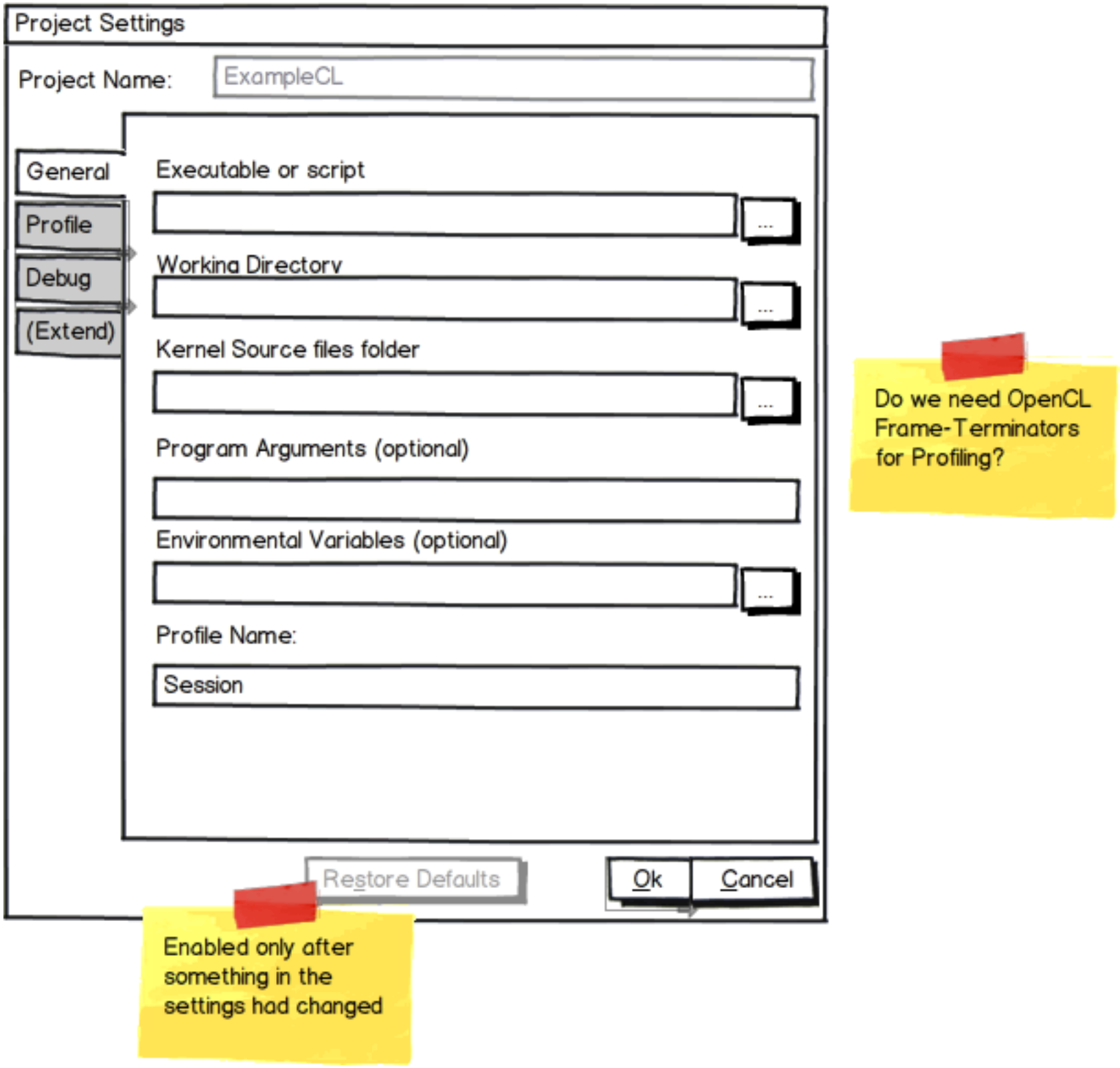
URNG (Debug mode)

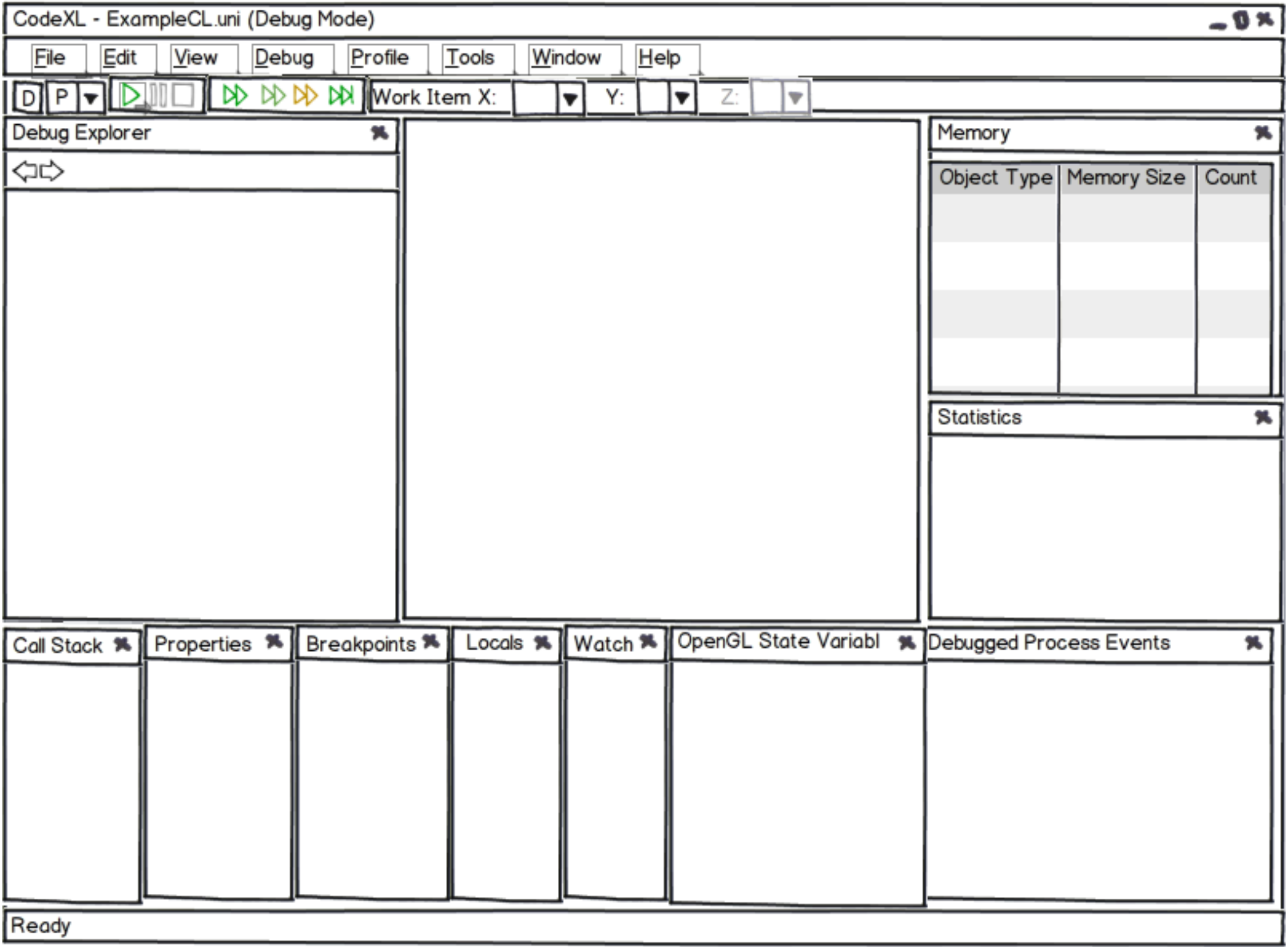
ExampleCL (Debug mode)

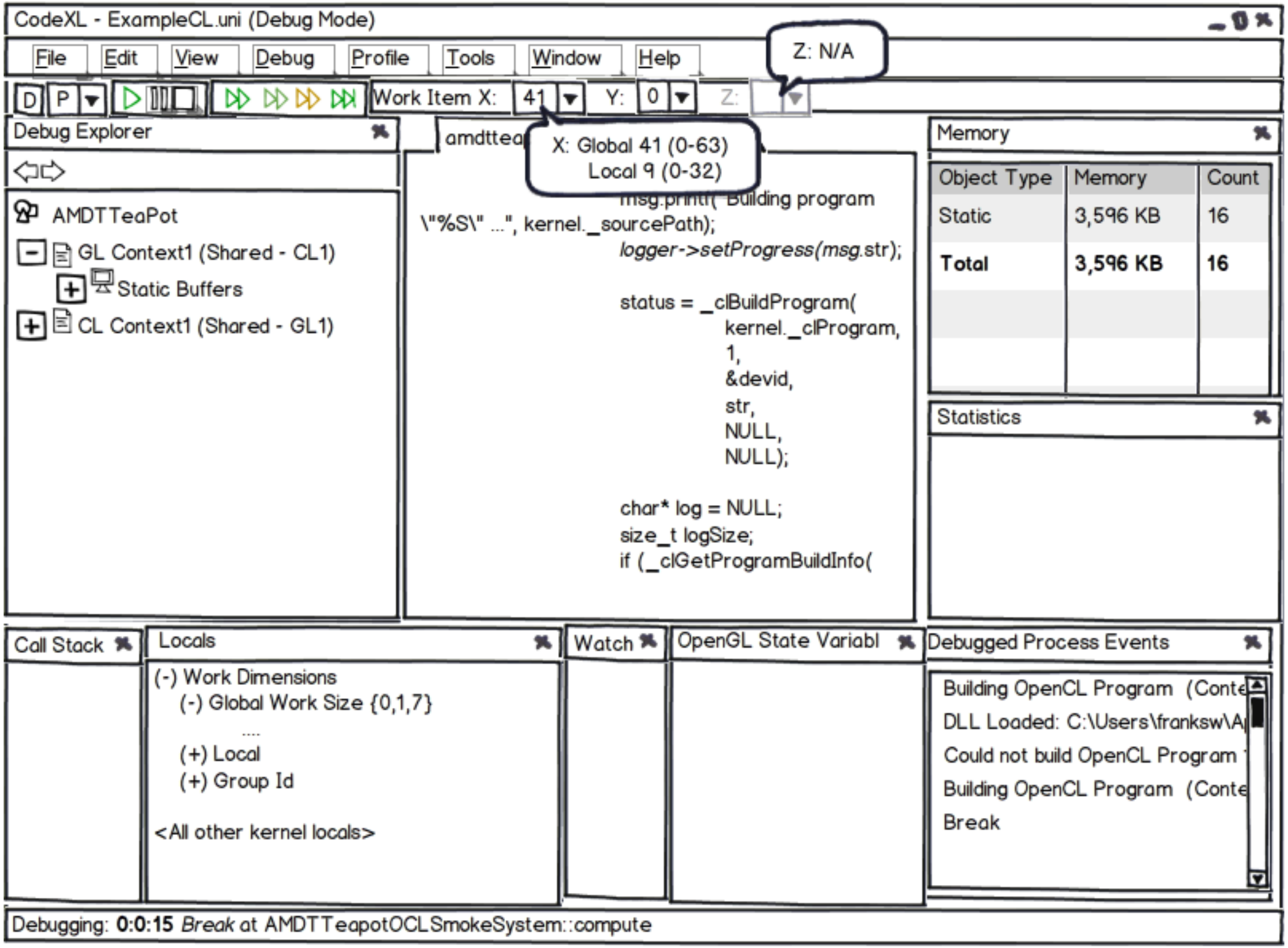
ExampleCL (Profile mode)

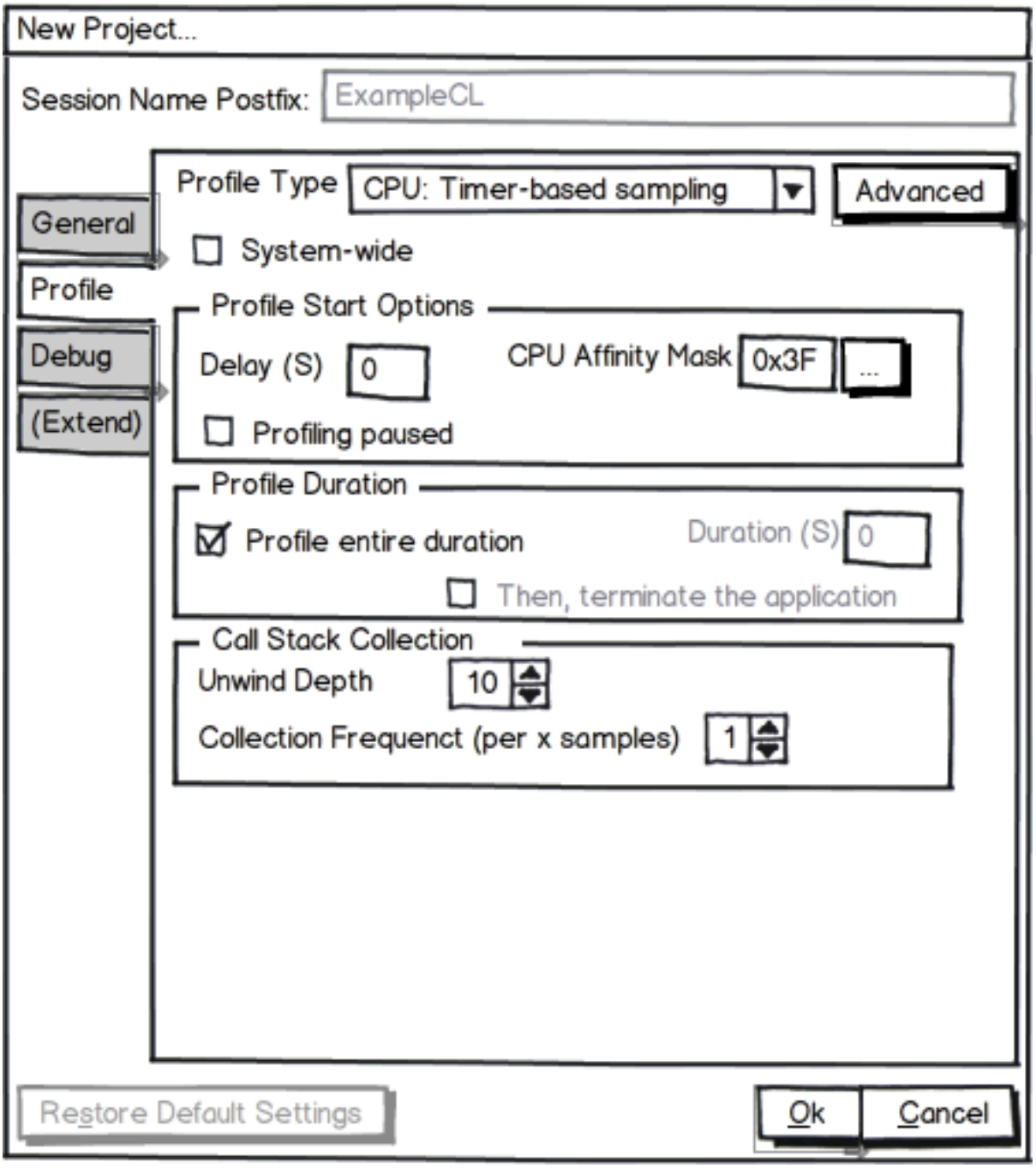
Ready

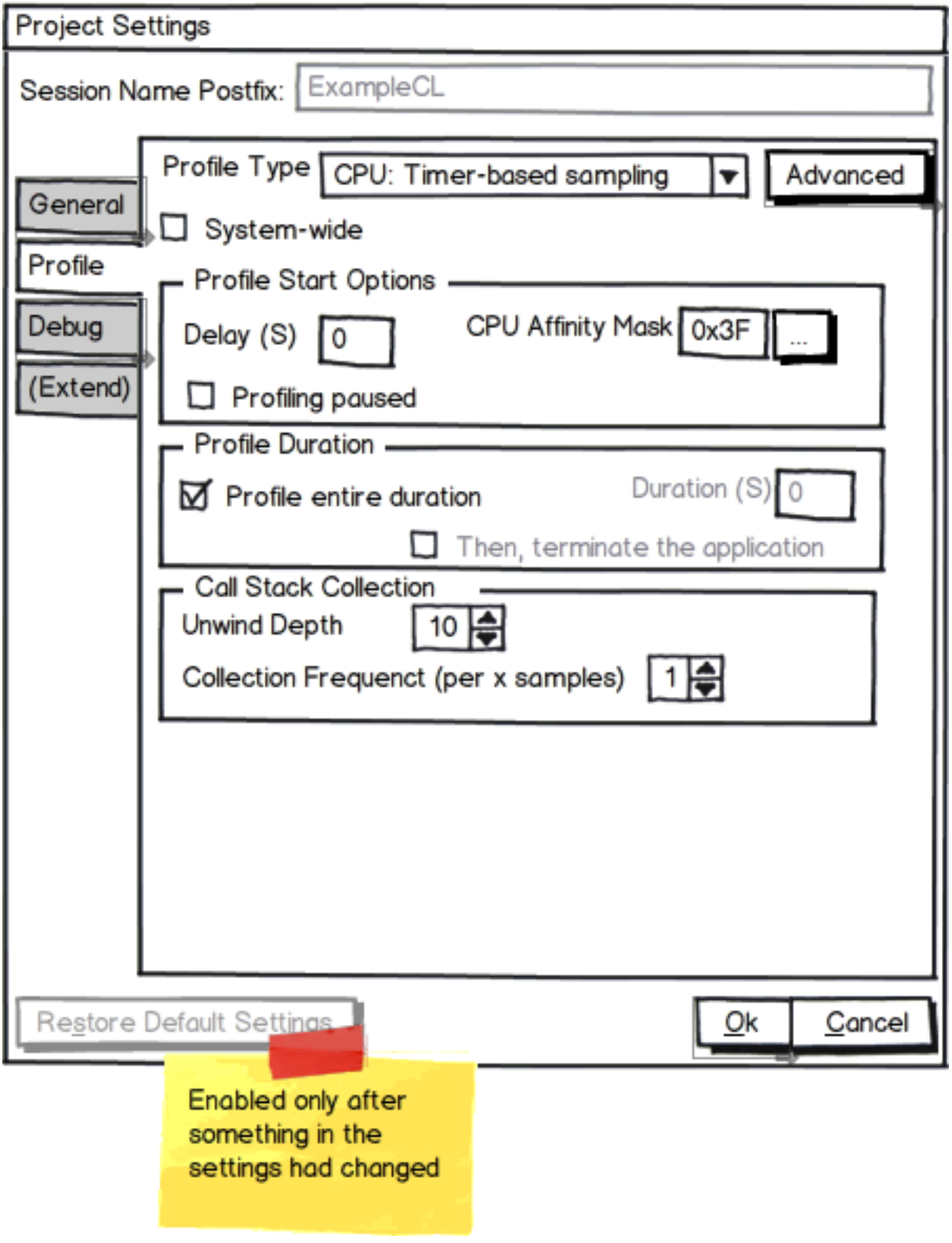

New Project...
Project Name:
ExampleCL
General
Profile
Debug
(Extend)
Executable or script
...
Workina Directorv
...
Program Arguments (optional)
Environmental Variables (optional)
...
Kernel Source files folder
...
Ok
Cancel

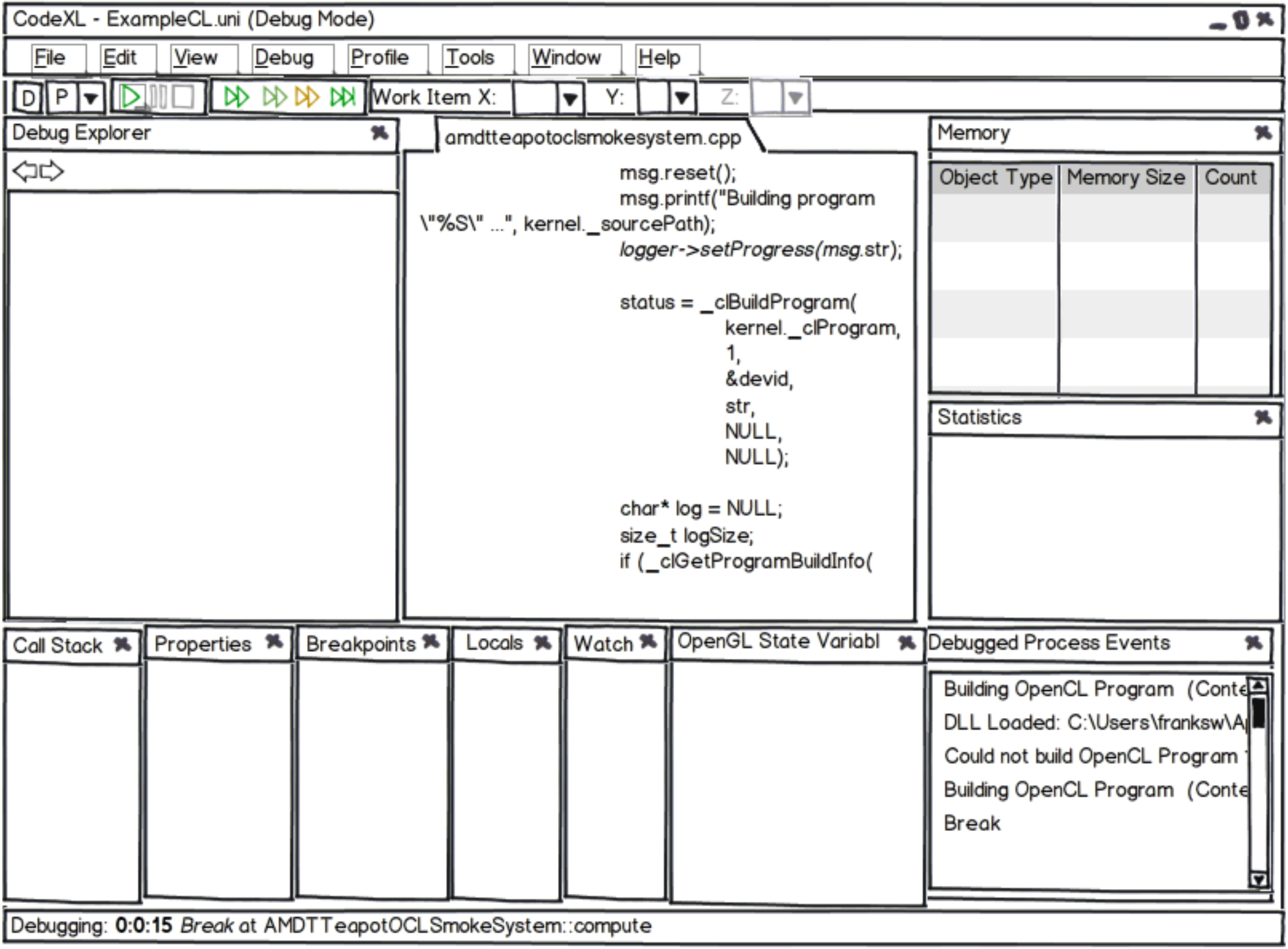

Project Settings
Project Name:
ExampleCL
General
Profile
Debug
(Extend)
Executable or script
...
Working Directory
...
Kernel Source files folder
...
Program Arguments (optional)
Environmental Variables (optional)
...
Profile Name:
Session
Restore Defaults
Ok
Cancel
Do we need OpenCL Frame-Terminators for Profiling?
Enabled only after something in the settings had changed

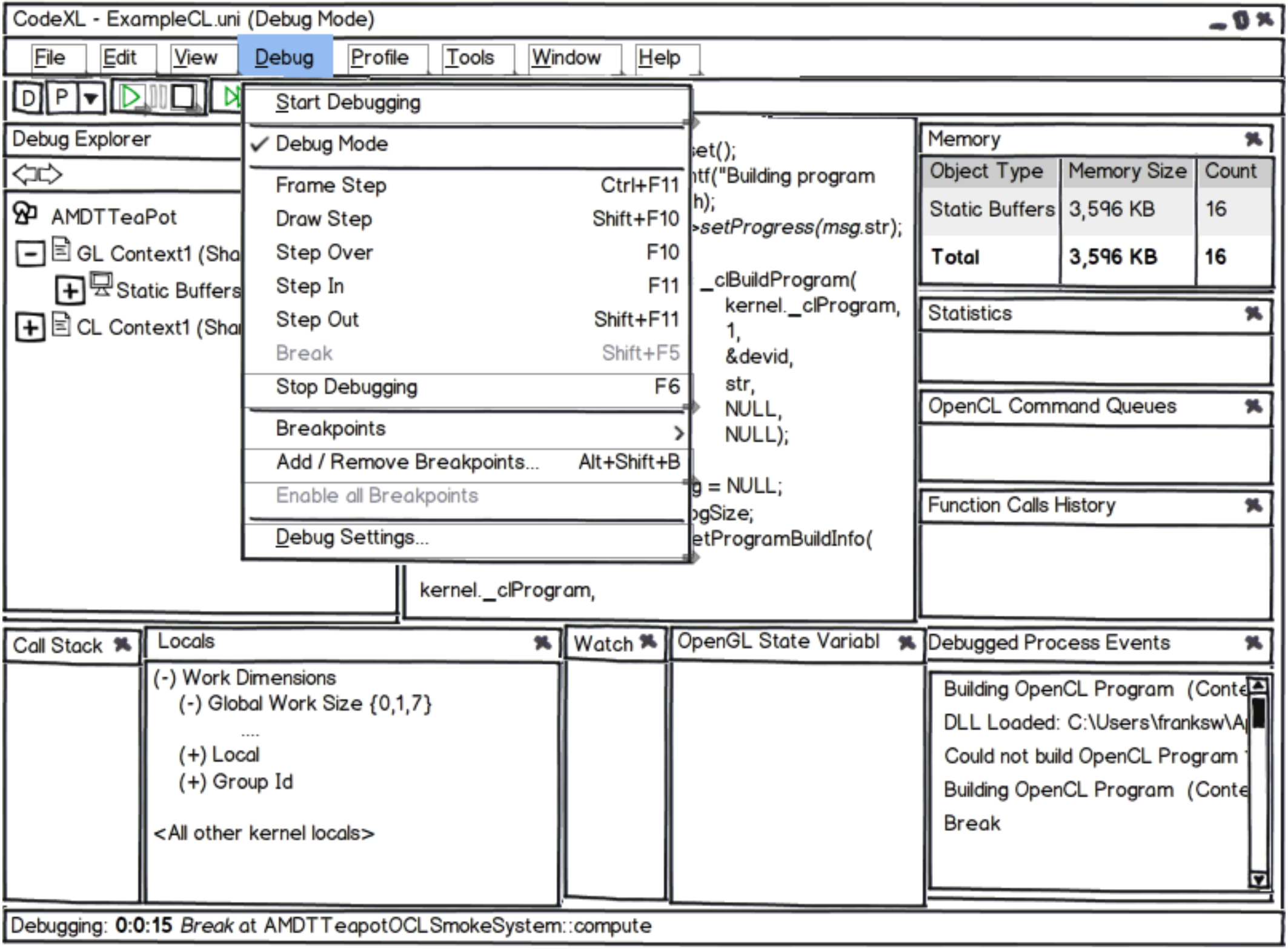

CodeXL - ExampleCL.uni (Debug Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Work Item X:
Y:
Z:
Debug Explorer
Memory
Object Type
Memory Size
Count
Statistics
Call Stack
Properties
Breakpoints
Locals
Watch
OpenGL State Variabl
Debugged Process Events
Ready


CodeXL - ExampleCL.uni (Debug Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
Z: N/A
D
P
Work Item X:
41
Y:
0
Z:
X: Global 41 (0-63)
Local 9 (0-32)
Debug Explorer
AMDTTeaPot
GL Context1 (Shared - CL1)
Static Buffers
CL Context1 (Shared - GL1)
amdttea
msg.printf("Building program
\"%S\" ...", kernel._sourcePath);
logger->setProgress(msg.str);
status = _clBuildProgram(
kernel._clProgram,
1,
&devid,
str,
NULL,
NULL);
char* log = NULL;
size_t logSize;
if (_clGetProgramBuildInfo(
Memory
Object Type
Memory
Count
Static
3,596 KB
16
Total
3,596 KB
16
Statistics
Call Stack
Locals
(-) Work Dimensions
(-) Global Work Size {0,1,7}
....
(+) Local
(+) Group Id
<All other kernel locals>
Watch
OpenGL State Variabl
Debugged Process Events
Building OpenCL Program (Conte
DLL Loaded: C:\Users\franksw\A
Could not build OpenCL Program
Building OpenCL Program (Conte
Break
Debugging: 0:0:15 Break at AMDTTeapotOCLSmokeSystem::compute


New Project...
Session Name Postfix:
ExampleCL
General
Profile
Debug
(Extend)
Profile Type
CPU: Timer-based sampling
Advanced
System-wide
Profile Start Options
Delay (S)
0
CPU Affinity Mask
0x3F
...
Profiling paused
Profile Duration
Profile entire duration
Duration (S)
0
Then, terminate the application
Call Stack Collection
Unwind Depth
10
Collection Frequenct (per x samples)
1
Restore Default Settings
Ok
Cancel


Project Settings
Session Name Postfix:
ExampleCL
General
Profile
Debug
(Extend)
Profile Type
CPU: Timer-based sampling
Advanced
System-wide
Profile Start Options
Delay (S)
0
CPU Affinity Mask
0x3F
...
Profiling paused
Profile Duration
Profile entire duration
Duration (S)
0
Then, terminate the application
Call Stack Collection
Unwind Depth
10
Collection Frequenct (per x samples)
1
Restore Default Settings
Ok
Cancel
Enabled only after something in the settings had changed


CodeXL - ExampleCL.uni (Debug Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Work Item X:
Y:
Z:
Debug Explorer
amdtteapotoclsmokesystem.cpp
msg.reset();
msg.printf("Building program \"%S\" ...", kernel._sourcePath);
logger->setProgress(msg.str);
status = _clBuildProgram(
kernel._clProgram,
1,
&devid,
str,
NULL,
NULL);
char* log = NULL;
size_t logSize;
if (_clGetProgramBuildInfo(
Memory
Object Type
Memory Size
Count
Statistics
Call Stack
Properties
Breakpoints
Locals
Watch
OpenGL State Variabl
Debugged Process Events
Building OpenCL Program (Conte
DLL Loaded: C:\Users\franksw\A
Could not build OpenCL Program
Building OpenCL Program (Conte
Break
Debugging: 0:0:15 Break at AMDTTeapotOCLSmokeSystem::compute


CodeXL - ExampleCL.uni (Debug Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
Start Debugging
Debug Mode
Frame Step Ctrl+F11
Draw Step Shift+F10
Step Over F10
Step In F11
Step Out Shift+F11
Break Shift+F5
Stop Debugging F6
Breakpoints
Add / Remove Breakpoints... Alt+Shift+B
Enable all Breakpoints
Debug Settings...
Debug Explorer
AMDTTeaPot
GL Context1 (Sha
Static Buffers
CL Context1 (Shar
Memory
Object Type
Memory Size
Count
Static Buffers
3,596 KB
16
Total
3,596 KB
16
Statistics
OpenCL Command Queues
Function Calls History
kernel._clProgram,
Call Stack
Locals
(-) Work Dimensions
(-) Global Work Size {0,1,7}
....
(+) Local
(+) Group Id
<All other kernel locals>
Watch
OpenGL State Variabl
Debugged Process Events
Building OpenCL Program (Conte
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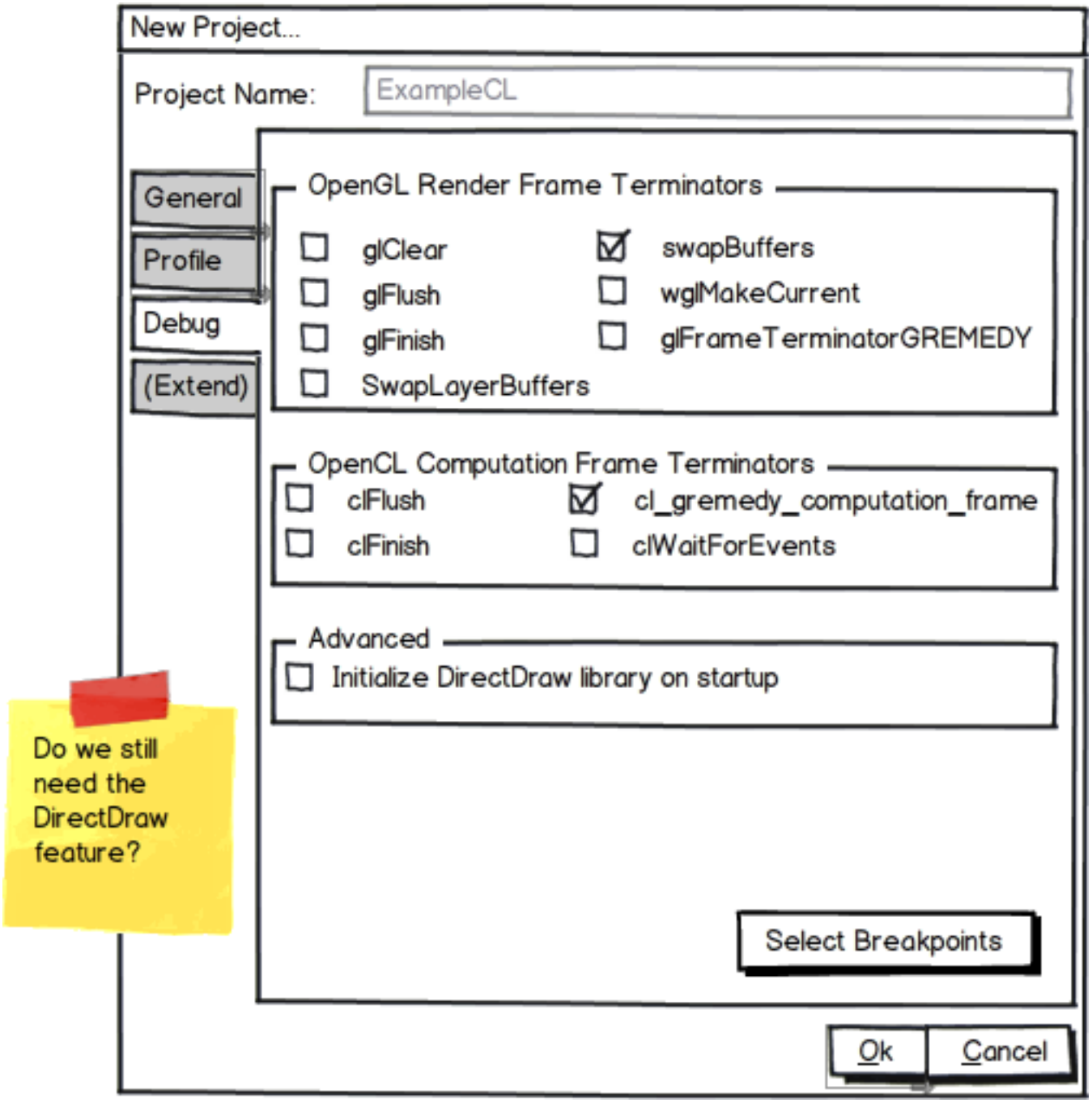
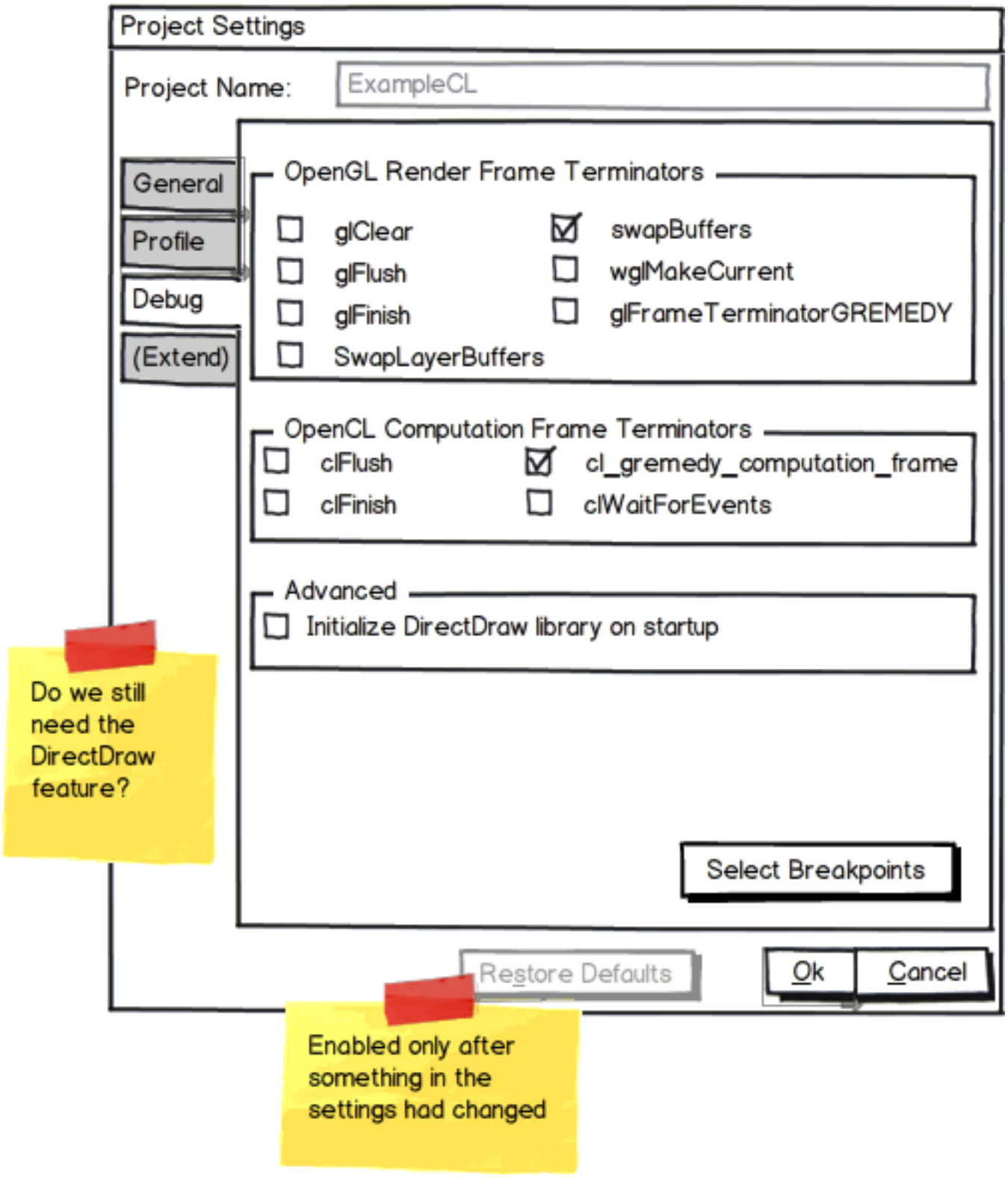
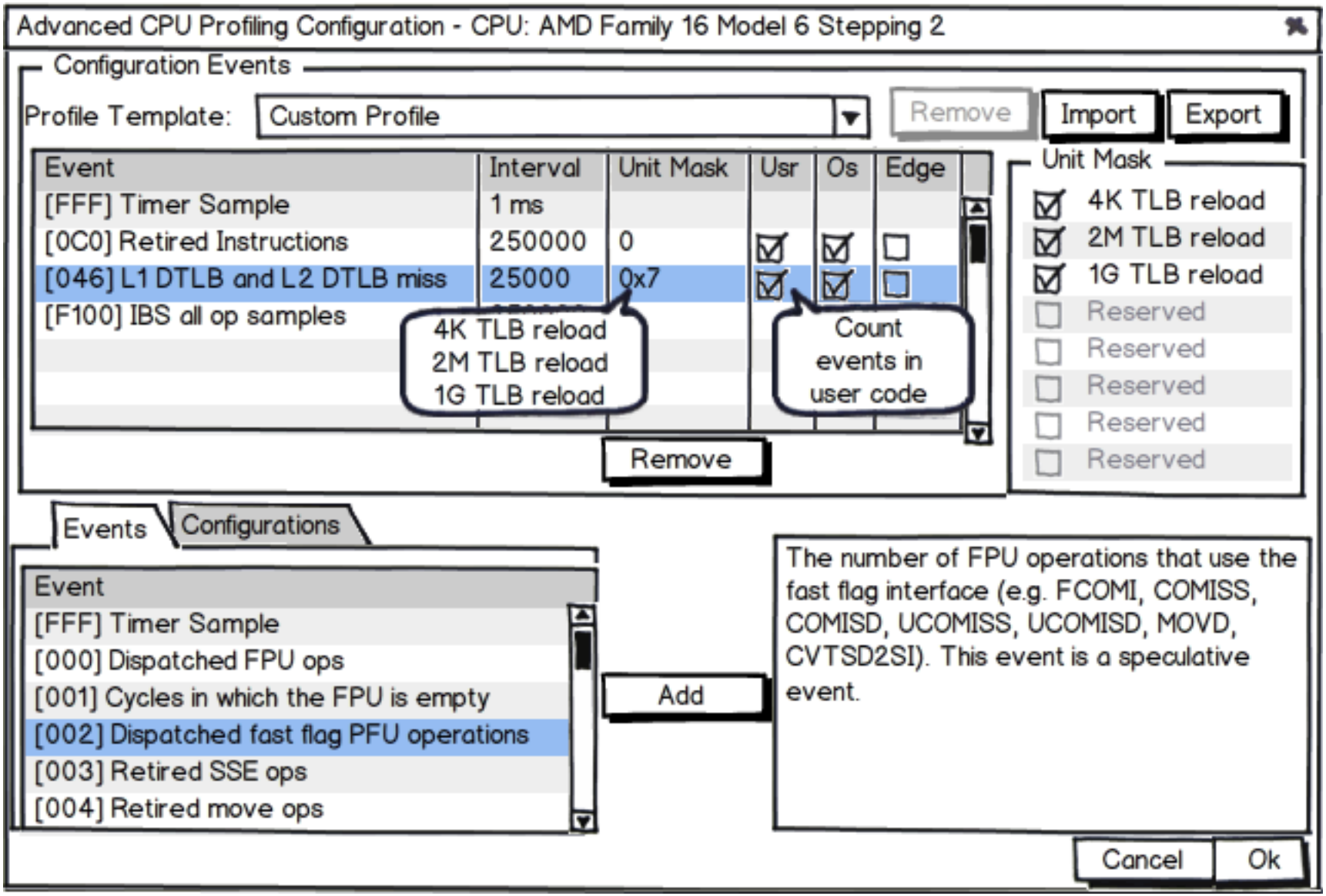
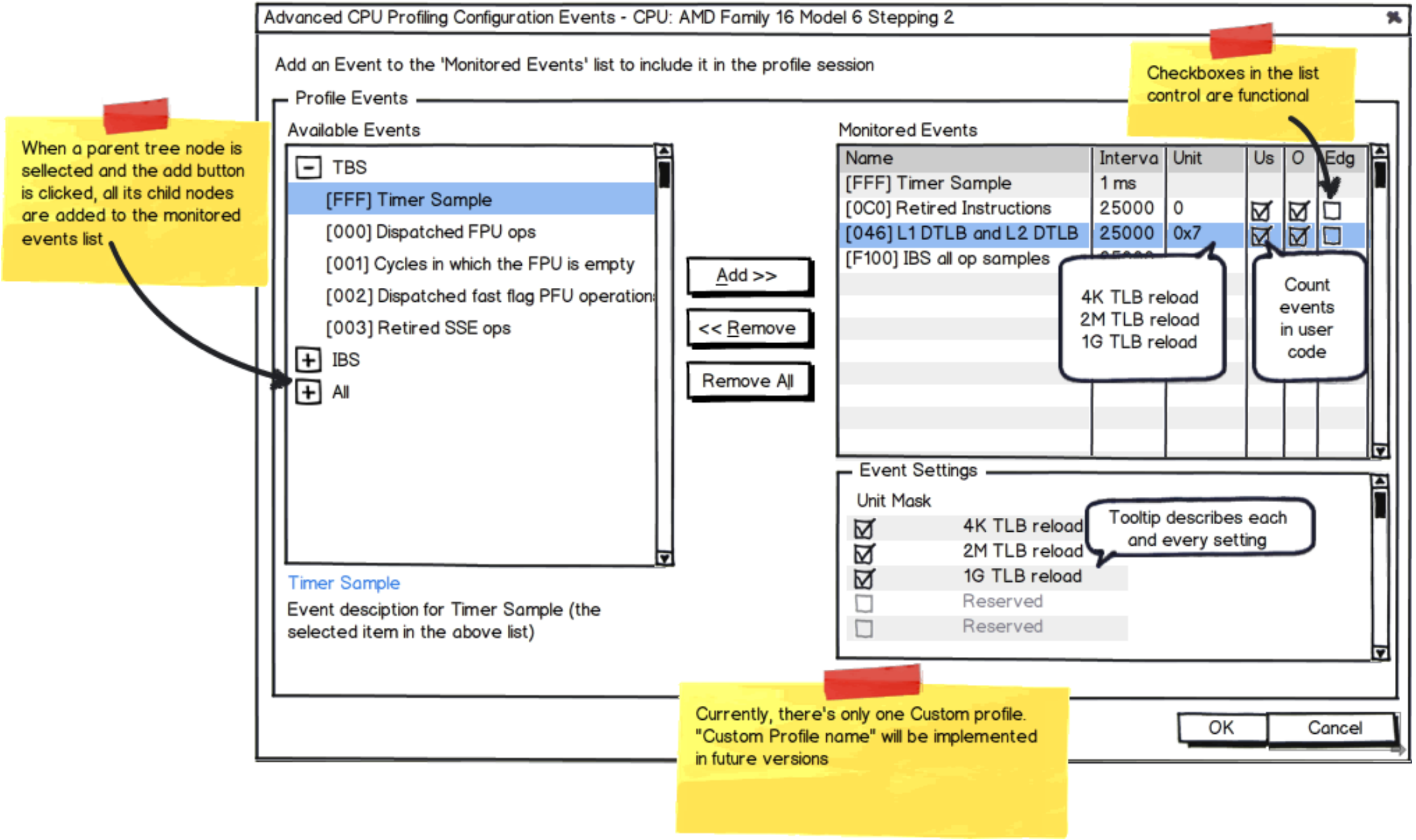
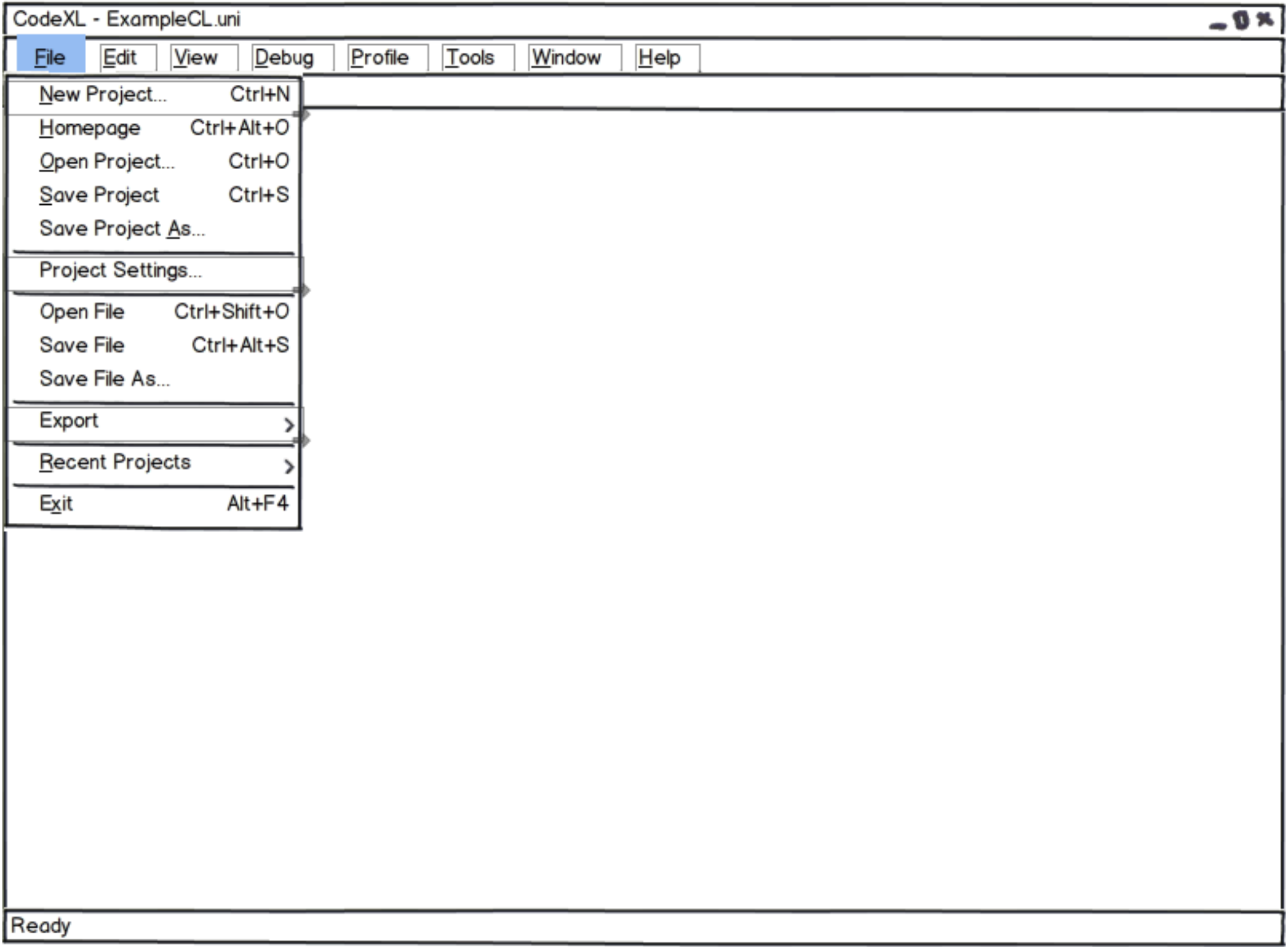
Building OpenCL Program (Conte
Break
Debugging: 0:0:15 Break at AMDTTeapotOCLSmokeSystem::compute

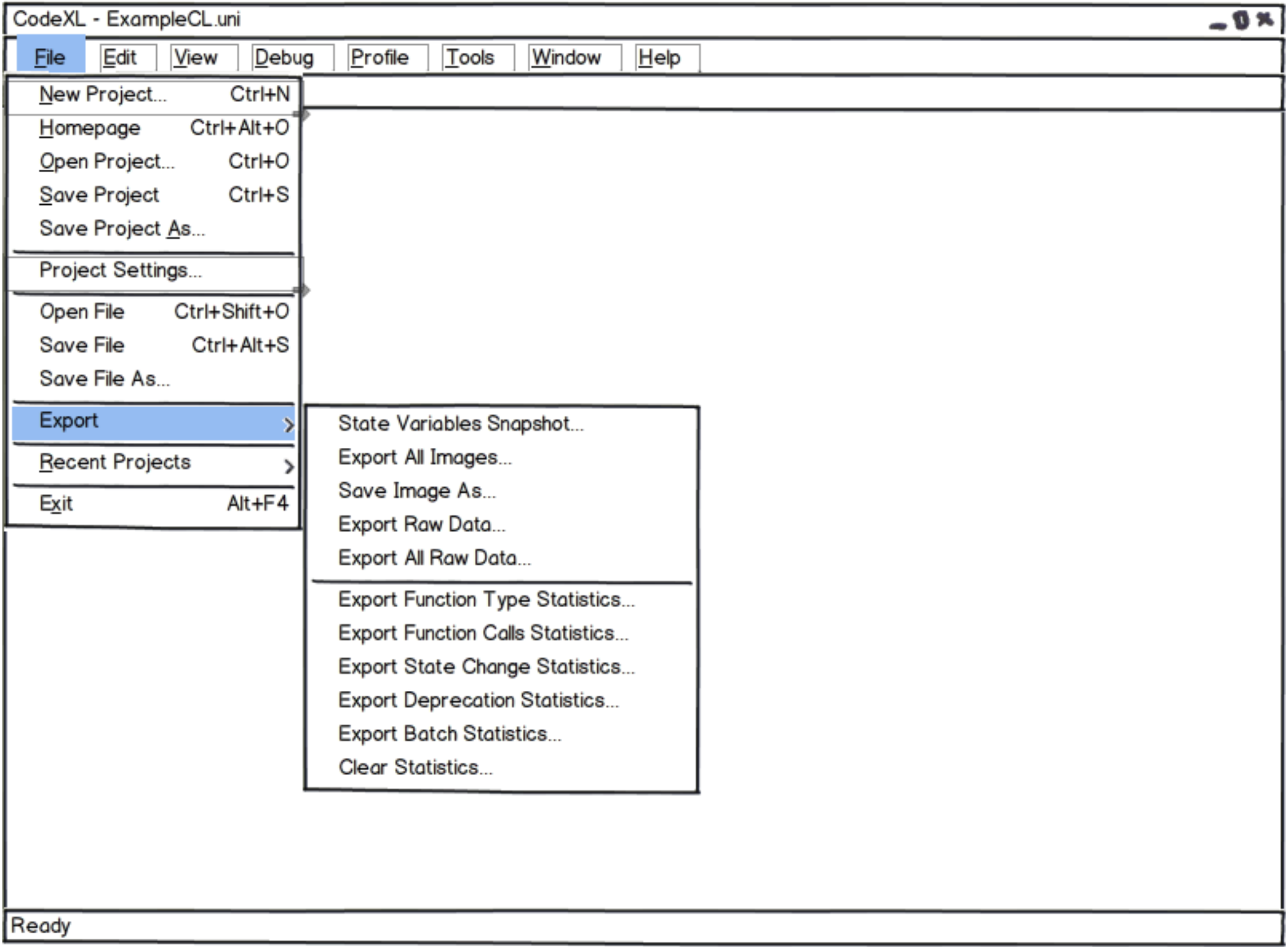

New Project...
Project Name:
ExampleCL
General
Profile
Debug
(Extend)
OpenGL Render Frame Terminators
glClear
glFlush
glFinish
SwapLayerBuffers
swapBuffers
wglMakeCurrent
glFrameTerminatorGREMEDY
OpenCL Computation Frame Terminators
clFlush
clFinish
cl_gremedy_computation_frame
clWaitForEvents
Advanced
Initialize DirectDraw library on startup
Do we still need the DirectDraw feature?
Select Breakpoints
Ok
Cancel

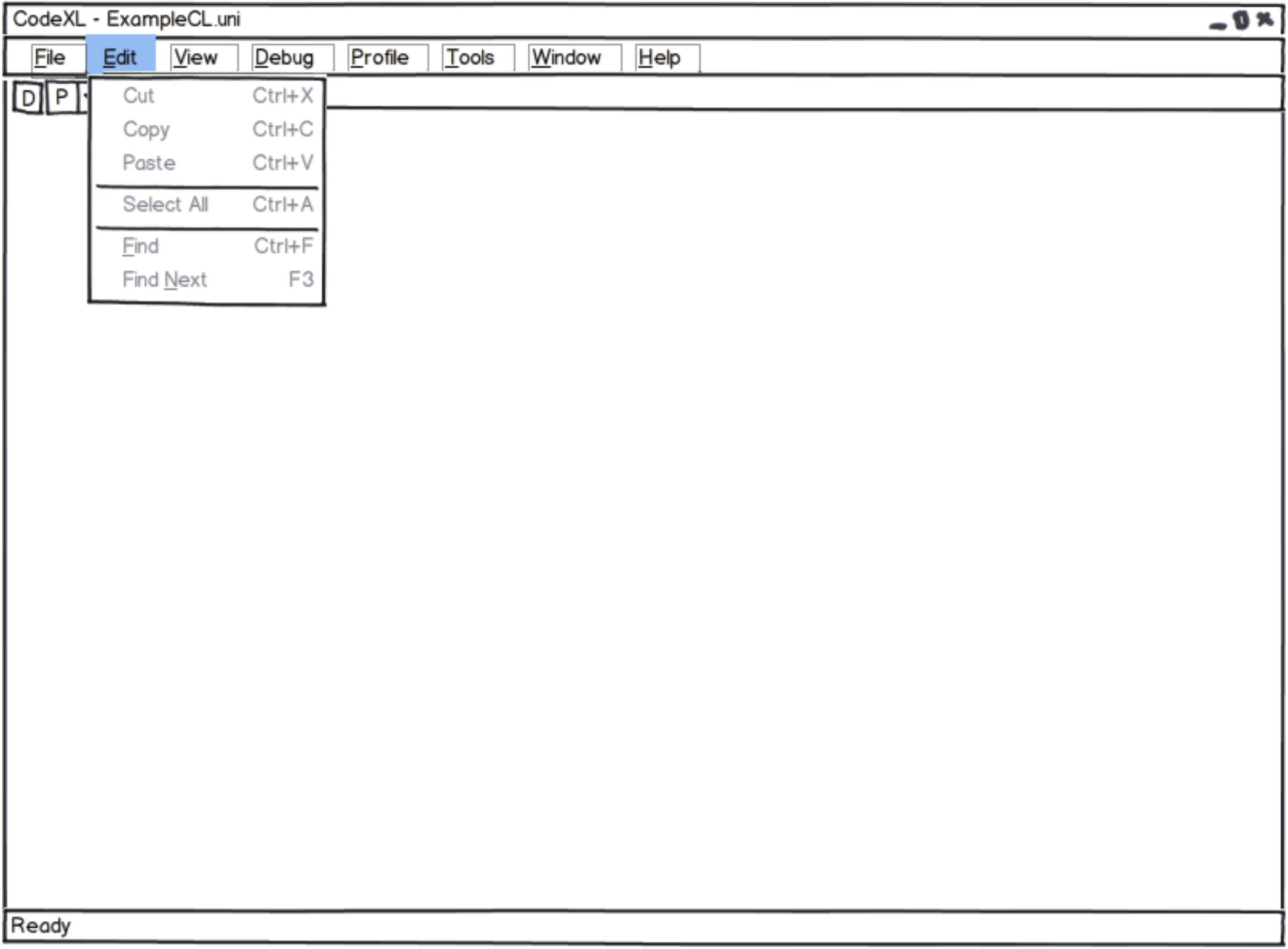

Project Settings
Project Name:
ExampleCL
General
Profile
Debug
(Extend)
OpenGL Render Frame Terminators
glClear
glFlush
glFinish
SwapLayerBuffers
swapBuffers
wglMakeCurrent
glFrameTerminatorGREMEDY
OpenCL Computation Frame Terminators
clFlush
clFinish
cl_gremedy_computation_frame
clWaitForEvents
Advanced
Initialize DirectDraw library on startup
Do we still need the DirectDraw feature?
Select Breakpoints
Restore Defaults
Ok
Cancel
Enabled only after something in the settings had changed

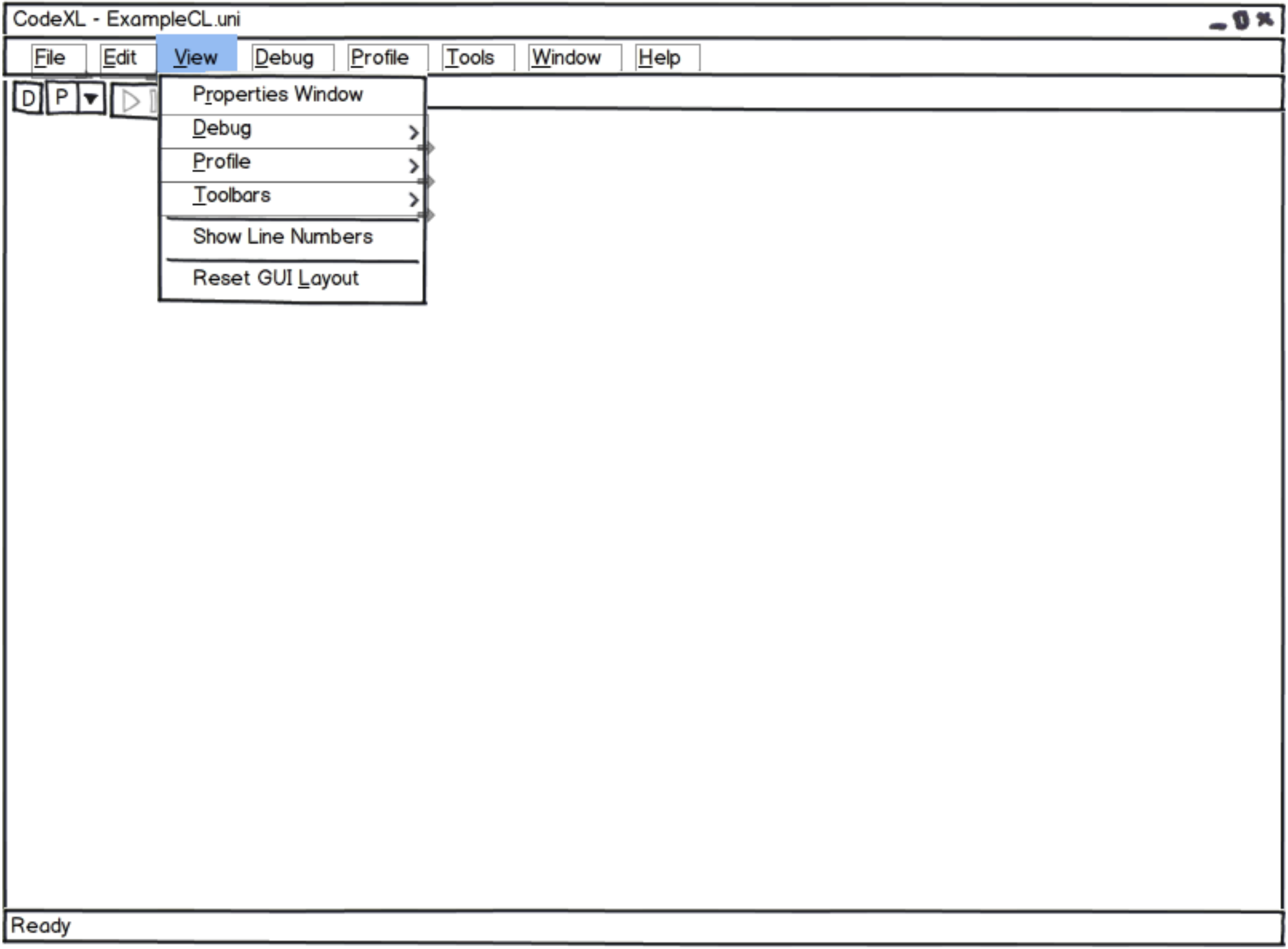

Advanced CPU Profiling Configuration - CPU: AMD Family 16 Model 6 Stepping 2
Configuration Events
Profile Template:
Custom Profile
Remove
Import
Export
Event
Interval
Unit Mask
Usr
Os
Edge
[FFF] Timer Sample
1 ms
[0C0] Retired Instructions
250000
0
[046] L1 DTLB and L2 DTLB miss
25000
0x7
[F100] IBS all op samples
4K TLB reload
2M TLB reload
1G TLB reload
Count events in user code
Remove
Unit Mask
4K TLB reload
2M TLB reload
1G TLB reload
Reserved
Reserved
Reserved
Reserved
Reserved
Events
Configurations
Event
[FFF] Timer Sample
[000] Dispatched FPU ops
[001] Cycles in which the FPU is empty
[002] Dispatched fast flag PFU operations
[003] Retired SSE ops
[004] Retired move ops
Add
The number of FPU operations that use the fast flag interface (e.g. FCOMI, COMISS, COMISD, UCOMISS, UCOMISD, MOVD, CVTSD2SI). This event is a speculative event.
Cancel
Ok

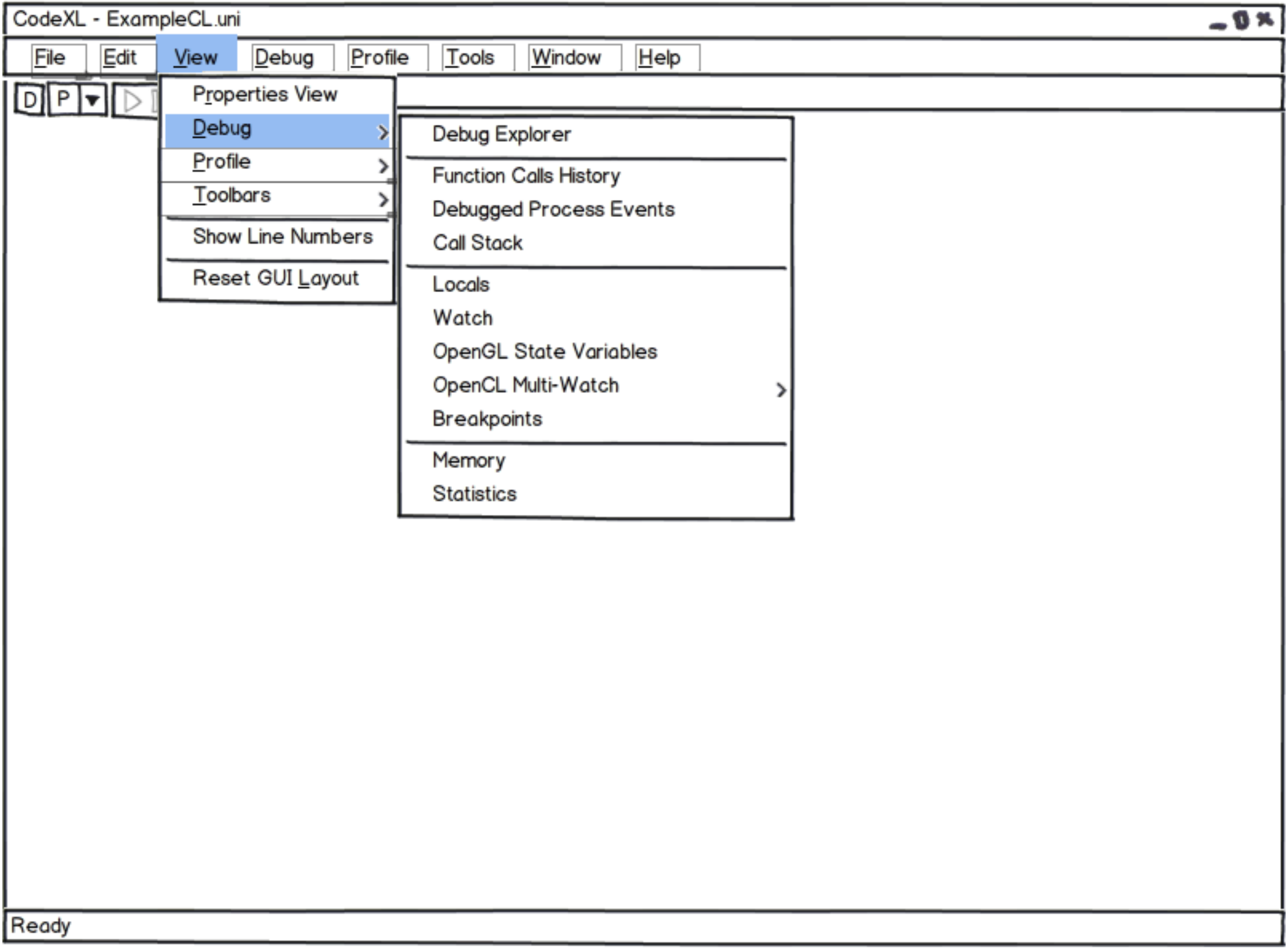

Advanced CPU Profiling Configuration Events - CPU: AMD Family 16 Model 6 Stepping 2
Add an Event to the 'Monitored Events' list to include it in the profile session
Profile Events
Available Events
TBS
[FFF] Timer Sample
[000] Dispatched FPU ops
[001] Cycles in which the FPU is empty
[002] Dispatched fast flag PFU operation
[003] Retired SSE ops
IBS
All
Add >>
<< Remove
Remove All
Monitored Events
Name
Interva
Unit
Us
O
Edg
[FFF] Timer Sample
1 ms
[0C0] Retired Instructions
25000
0
[046] L1 DTLB and L2 DTLB
25000
0x7
[F100] IBS all op samples
Timer Sample
Event desciption for Timer Sample (the selected item in the above list)
Event Settings
Unit Mask
4K TLB reload
2M TLB reload
1G TLB reload
Reserved
Reserved
OK
Cancel
When a parent tree node is sellected and the add button is clicked, all its child nodes are added to the monitored events list
Checkboxes in the list control are functional
4K TLB reload
2M TLB reload
1G TLB reload
Count events in user code
Tooltip describes each and every setting
Currently, there's only one Custom profile. "Custom Profile name" will be implemented in future versions

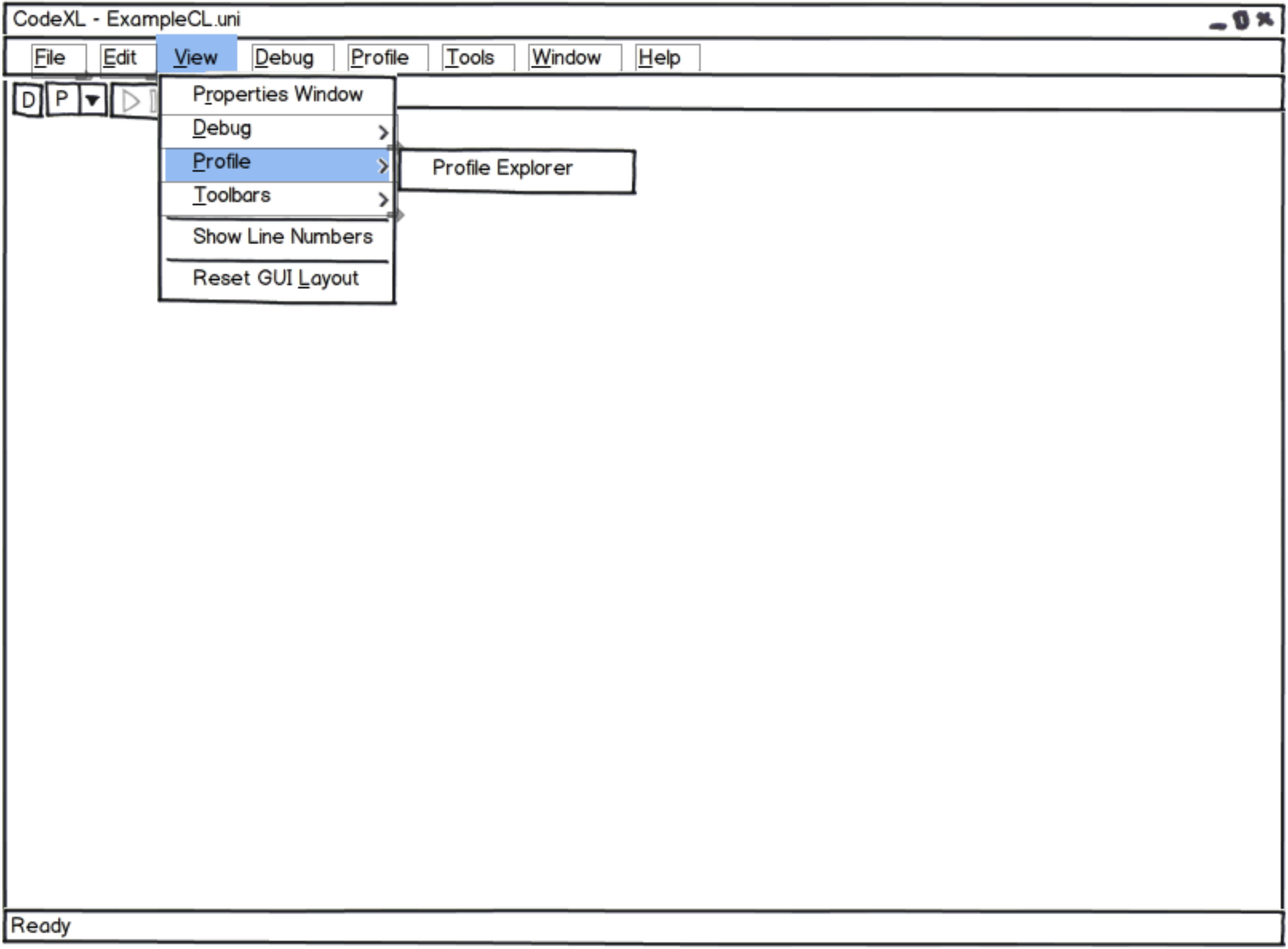

CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
New Project... Ctrl+N
Homepage Ctrl+Alt+O
Open Project... Ctrl+O
Save Project Ctrl+S
Save Project As...
Project Settings...
Open File Ctrl+Shift+O
Save File Ctrl+Alt+S
Save File As...
Export
Recent Projects
Exit Alt+F4
Ready

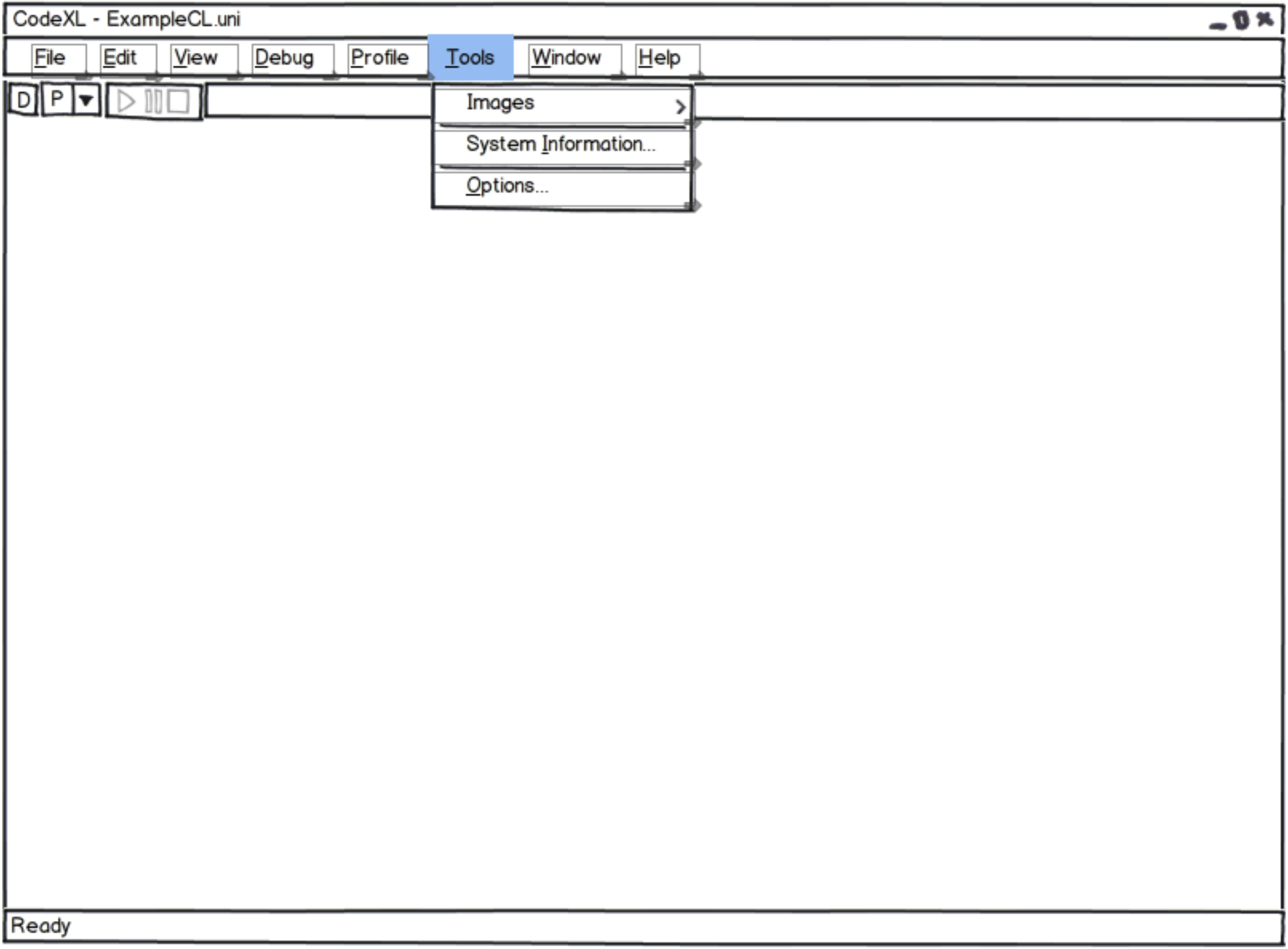

CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
New Project... Ctrl+N
Homepage Ctrl+Alt+O
Open Project... Ctrl+O
Save Project Ctrl+S
Save Project As...
Project Settings...
Open File Ctrl+Shift+O
Save File Ctrl+Alt+S
Save File As...
Export
Recent Projects
Exit Alt+F4
State Variables Snapshot...
Export All Images...
Save Image As...
Export Raw Data...
Export All Raw Data...
Export Function Type Statistics...
Export Function Calls Statistics...
Export State Change Statistics...
Export Deprecation Statistics...
Export Batch Statistics...
Clear Statistics...
Ready

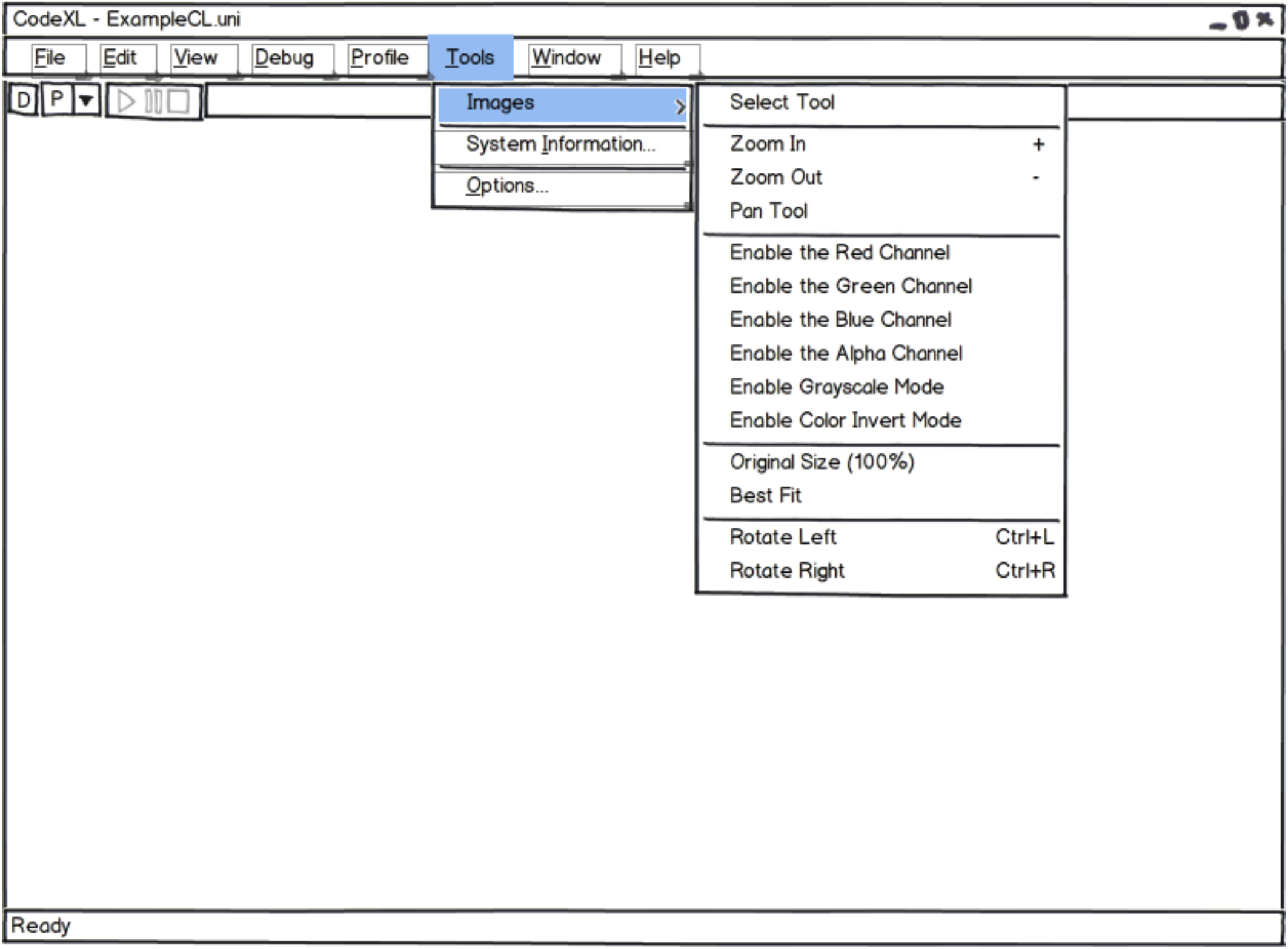

CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Cut Ctrl+X
Copy Ctrl+C
Paste Ctrl+V
Select All Ctrl+A
Find Ctrl+F
Find Next F3
Ready

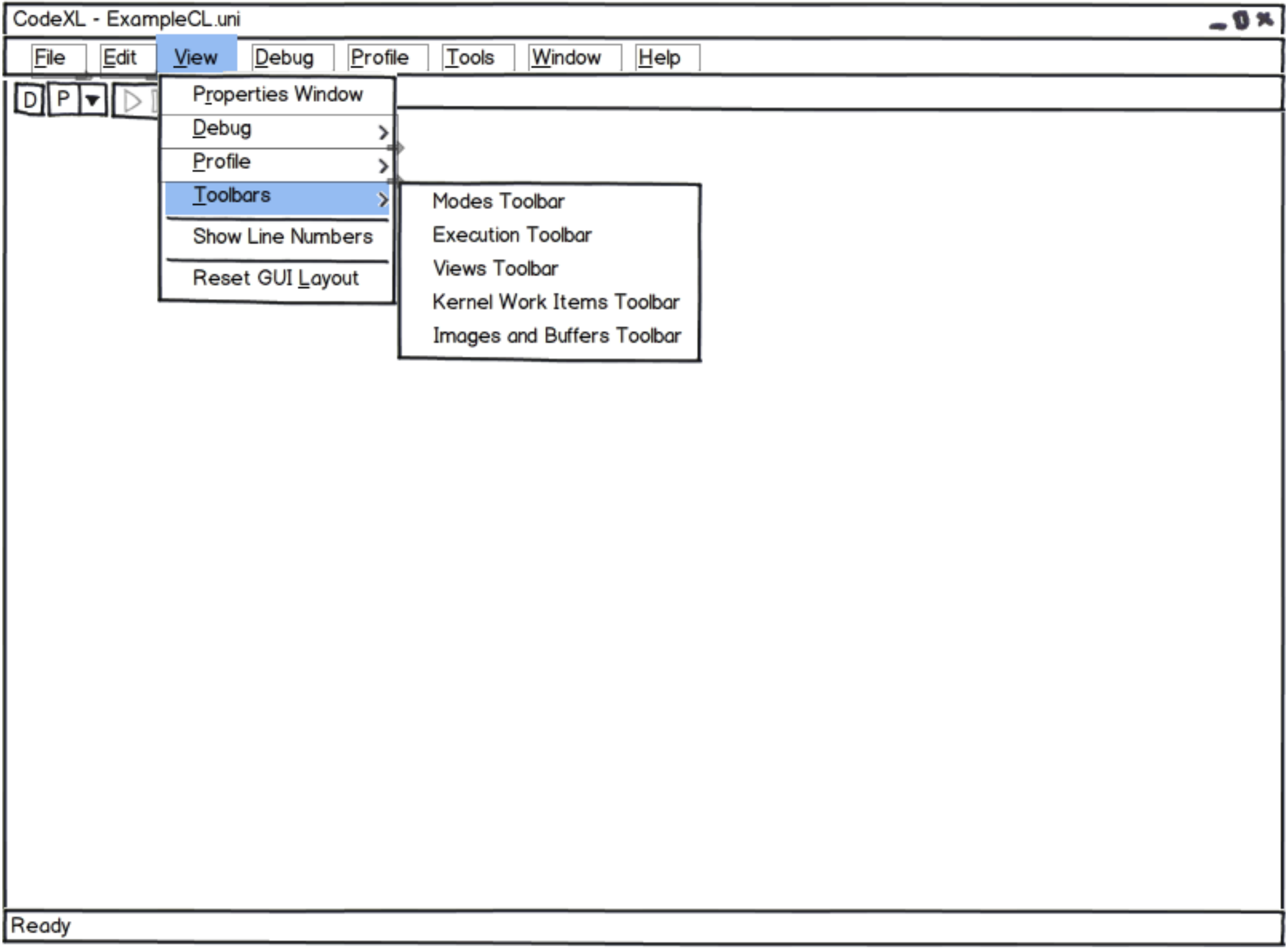

CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Properties Window
Debug
Profile
Toolbars
Show Line Numbers
Reset GUI Layout
Ready

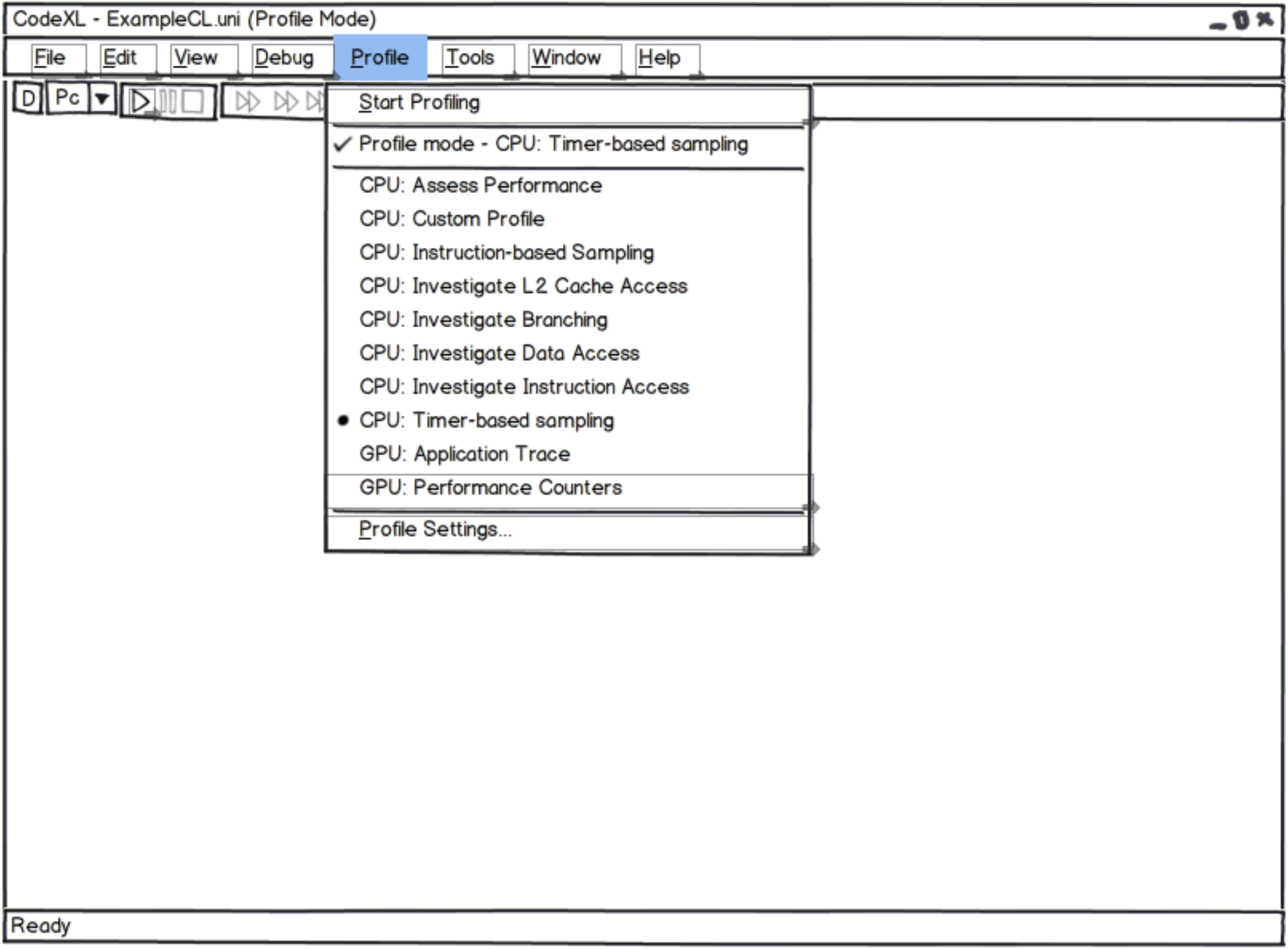

CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Properties View
Debug
Profile
Toolbars
Show Line Numbers
Reset GUI Layout
Debug Explorer
Function Calls History
Debugged Process Events
Call Stack
Locals
Watch
OpenGL State Variables
OpenCL Multi-Watch
Breakpoints
Memory
Statistics
Ready

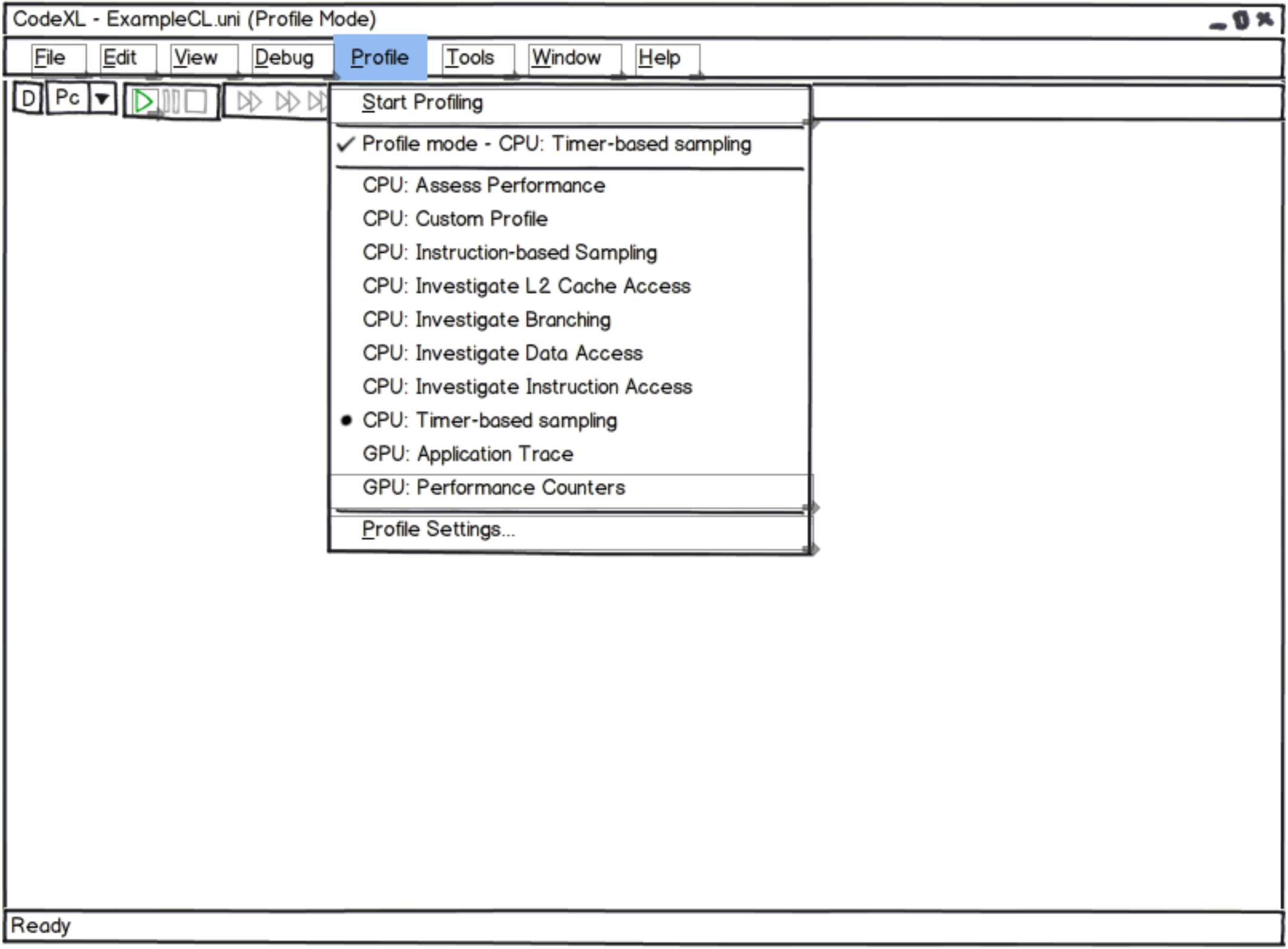

CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Properties Window
Debug
Profile
Toolbars
Show Line Numbers
Reset GUI Layout
Profile Explorer
Ready


CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Images
System Information...
Options...
Ready


CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Images
System Information...
Options...
Select Tool
Zoom In +
Zoom Out -
Pan Tool
Enable the Red Channel
Enable the Green Channel
Enable the Blue Channel
Enable the Alpha Channel
Enable Grayscale Mode
Enable Color Invert Mode
Original Size (100%)
Best Fit
Rotate Left Ctrl+L
Rotate Right Ctrl+R
Ready


CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Properties Window
Debug
Profile
Toolbars
Show Line Numbers
Reset GUI Layout
Modes Toolbar
Execution Toolbar
Views Toolbar
Kernel Work Items Toolbar
Images and Buffers Toolbar
Ready


CodeXL - ExampleCL.uni (Profile Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
D
Pc
Start Profiling
Profile mode - CPU: Timer-based sampling
CPU: Assess Performance
CPU: Custom Profile
CPU: Instruction-based Sampling
CPU: Investigate L2 Cache Access
CPU: Investigate Branching
CPU: Investigate Data Access
CPU: Investigate Instruction Access
CPU: Timer-based sampling
GPU: Application Trace
GPU: Performance Counters
Profile Settings...
Ready


CodeXL - ExampleCL.uni (Profile Mode)
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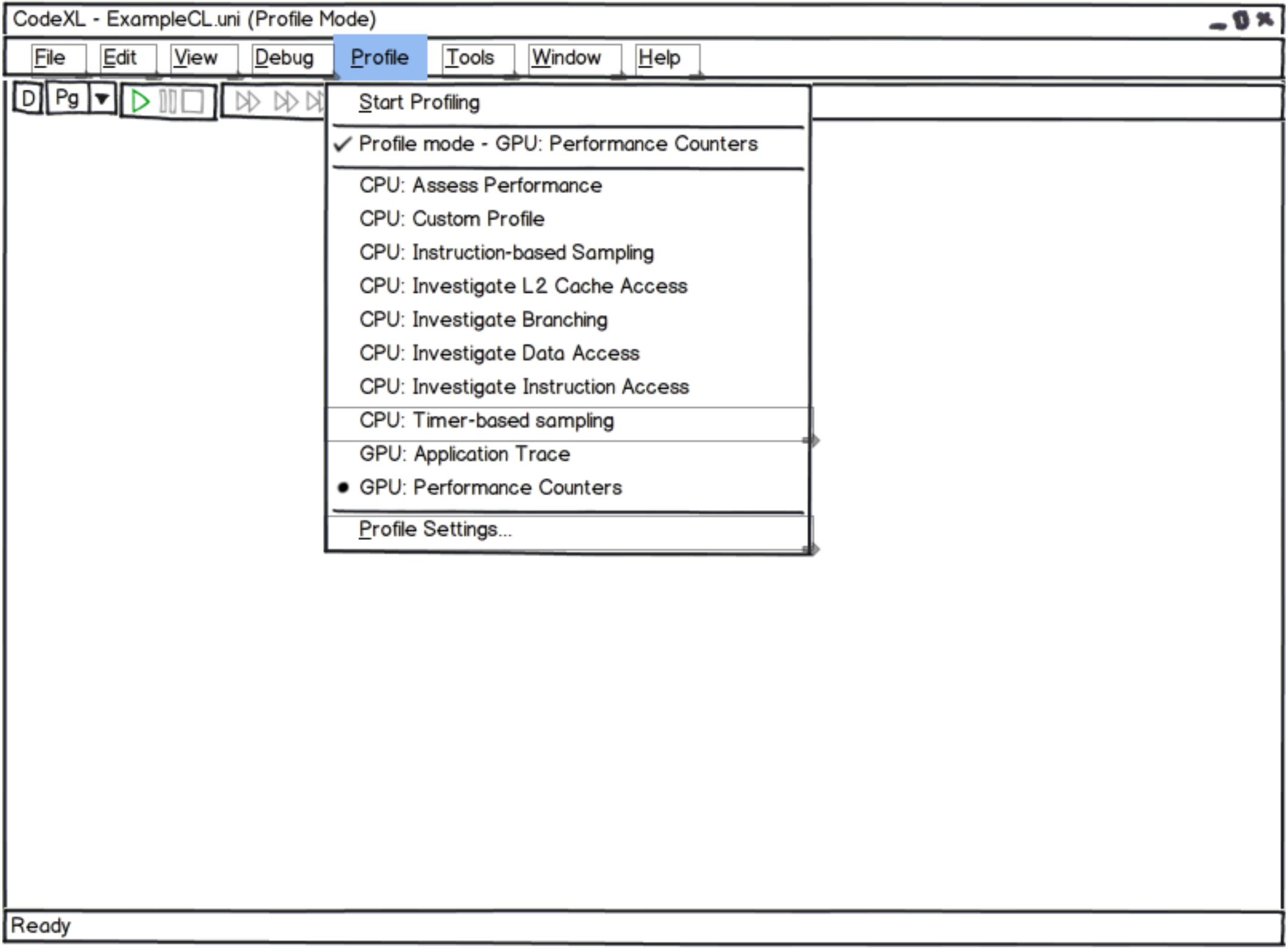
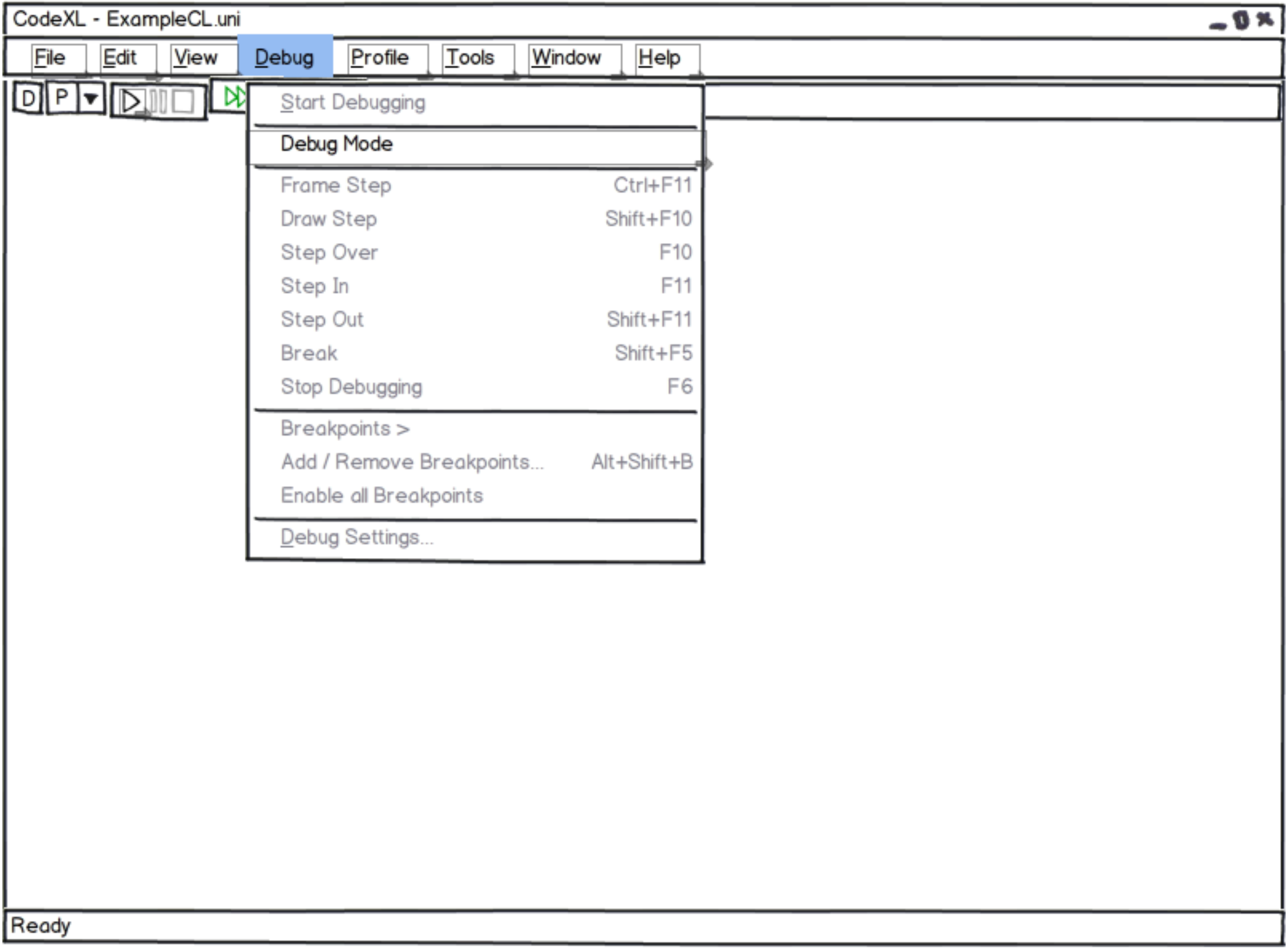
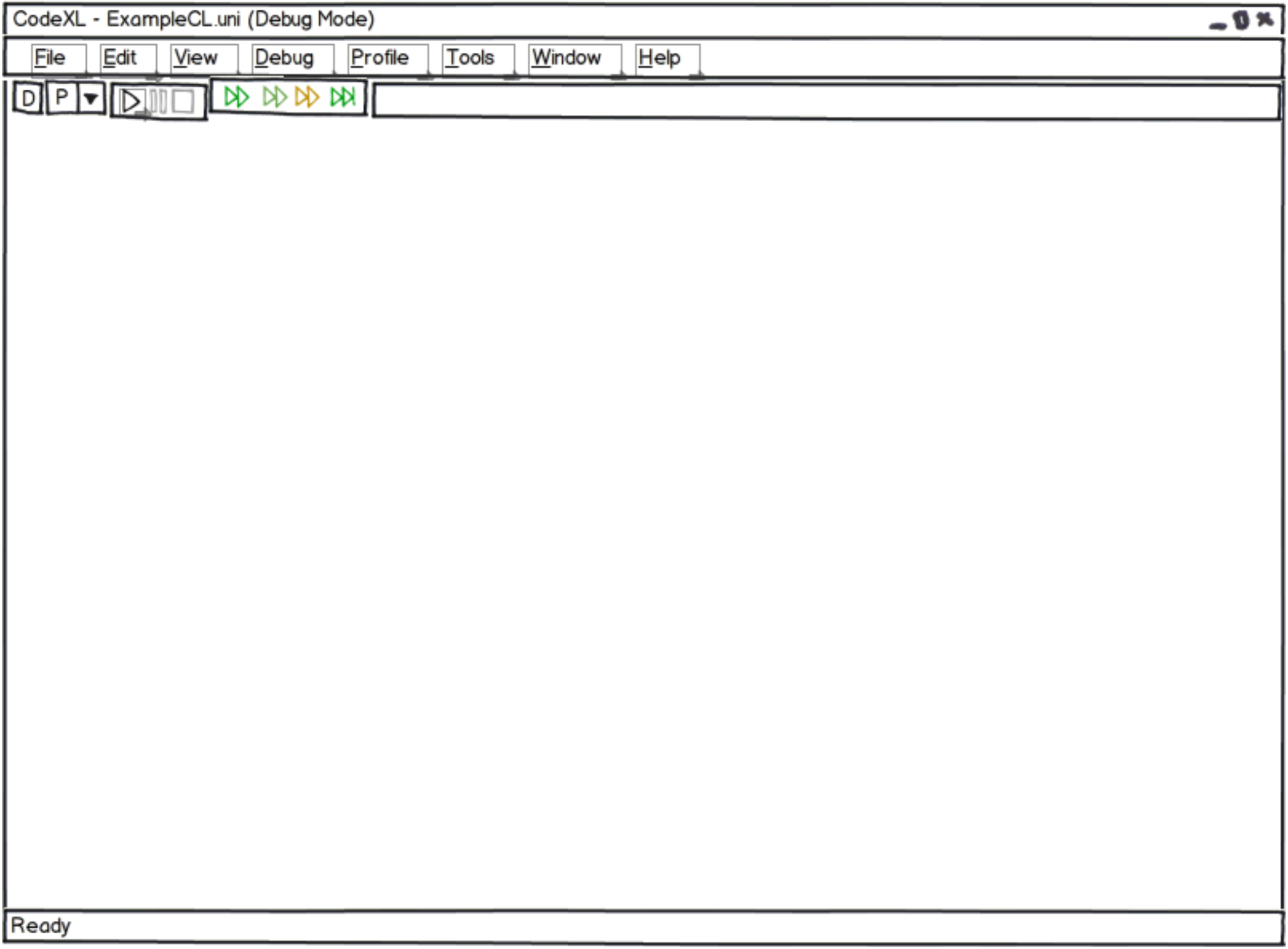
Profile
Tools
Window
Help
D
Pc
Start Profiling
Profile mode - CPU: Timer-based sampling
CPU: Assess Performance
CPU: Custom Profile
CPU: Instruction-based Sampling
CPU: Investigate L2 Cache Access
CPU: Investigate Branching
CPU: Investigate Data Access
CPU: Investigate Instruction Access
CPU: Timer-based sampling
GPU: Application Trace
GPU: Performance Counters
Profile Settings...
Ready


CodeXL - ExampleCL.uni (Profile Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
D
Pg
Start Profiling
Profile mode - GPU: Performance Counters
CPU: Assess Performance
CPU: Custom Profile
CPU: Instruction-based Sampling
CPU: Investigate L2 Cache Access
CPU: Investigate Branching
CPU: Investigate Data Access
CPU: Investigate Instruction Access
CPU: Timer-based sampling
GPU: Application Trace
GPU: Performance Counters
Profile Settings...
Ready


CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Start Debugging
Debug Mode
Frame Step Ctrl+F11
Draw Step Shift+F10
Step Over F10
Step In F11
Step Out Shift+F11
Break Shift+F5
Stop Debugging F6
Breakpoints >
Add / Remove Breakpoints... Alt+Shift+B
Enable all Breakpoints
Debug Settings...
Ready


CodeXL - ExampleCL.uni (Debug Mode)
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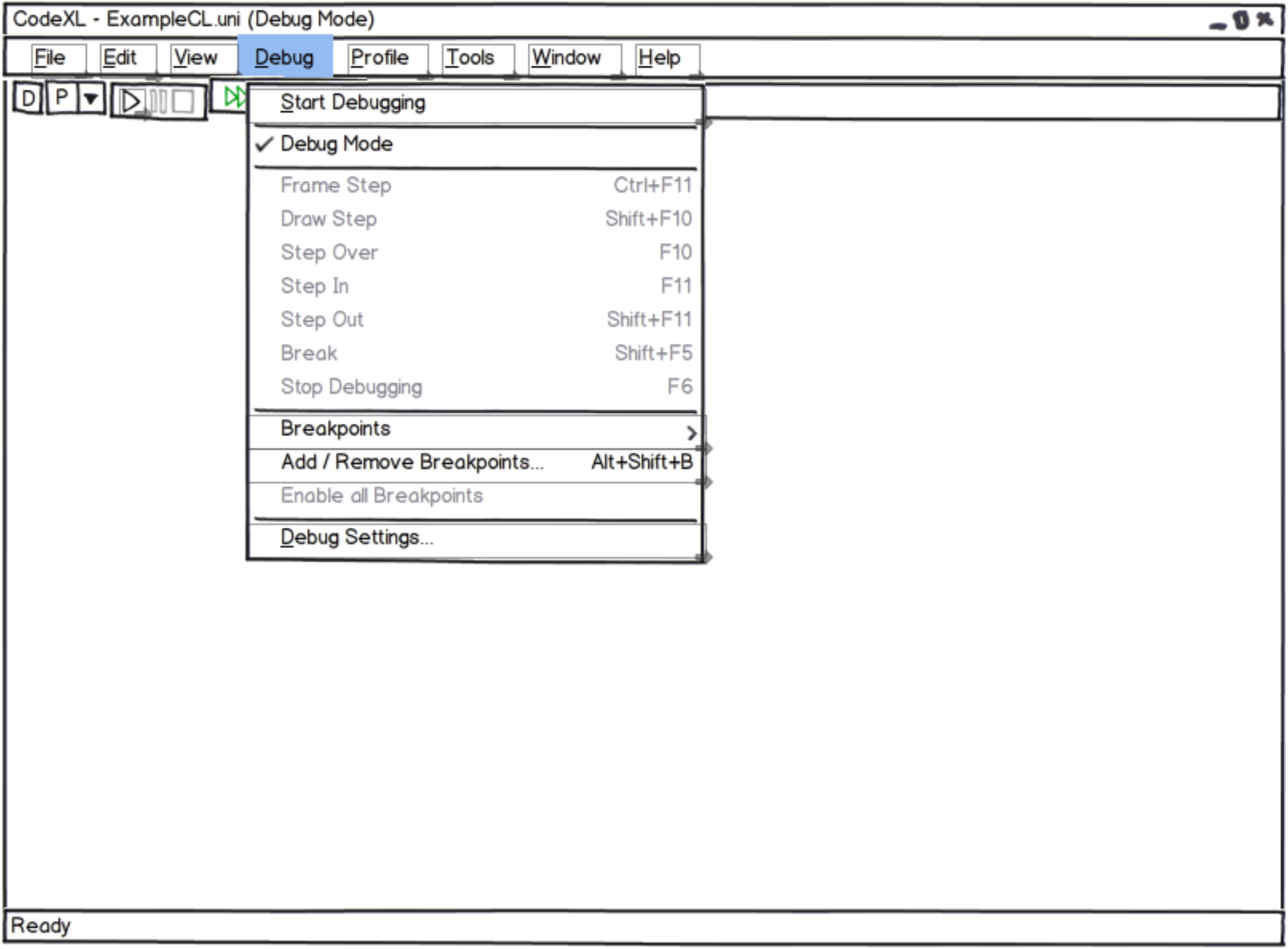
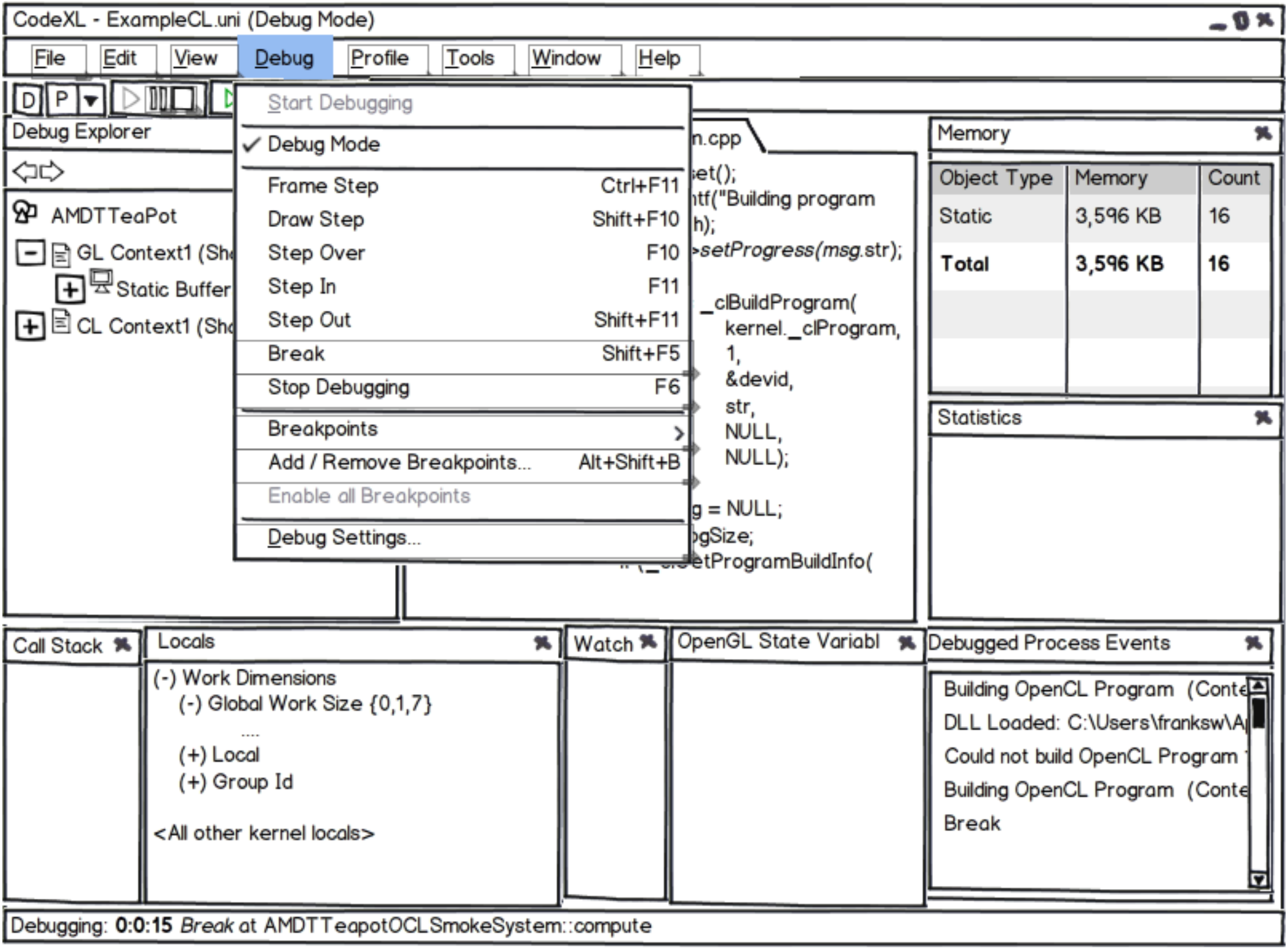
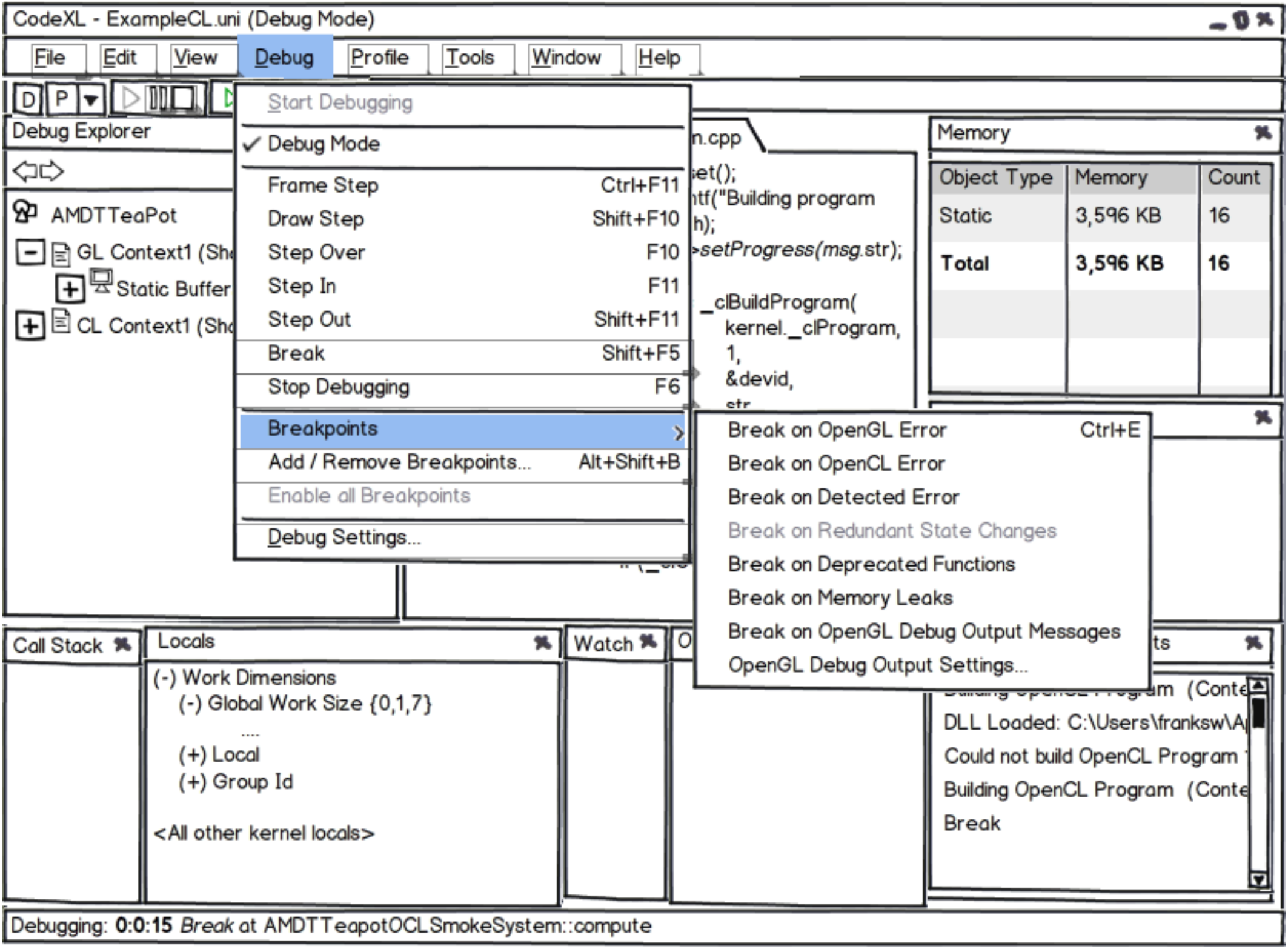
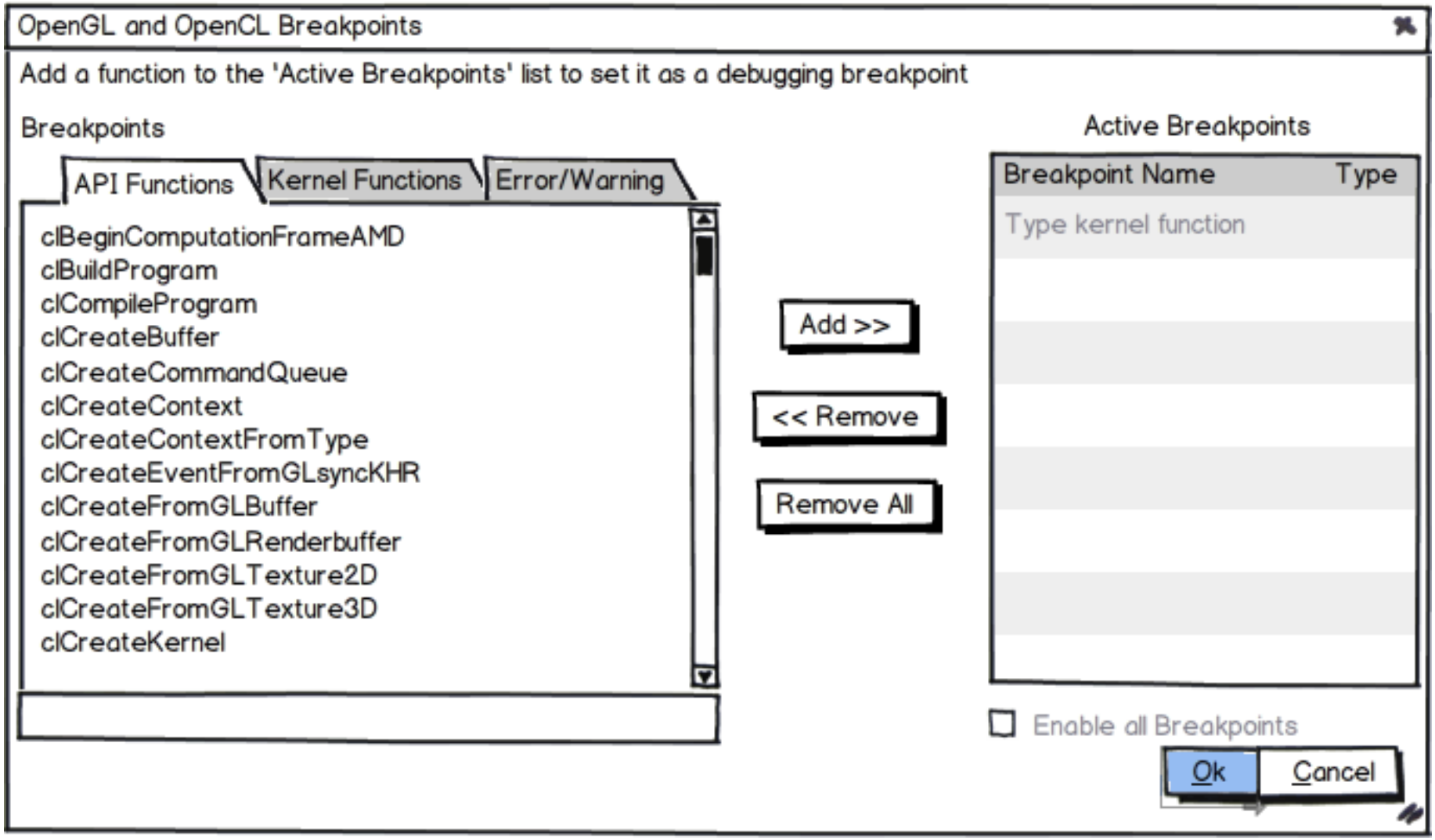
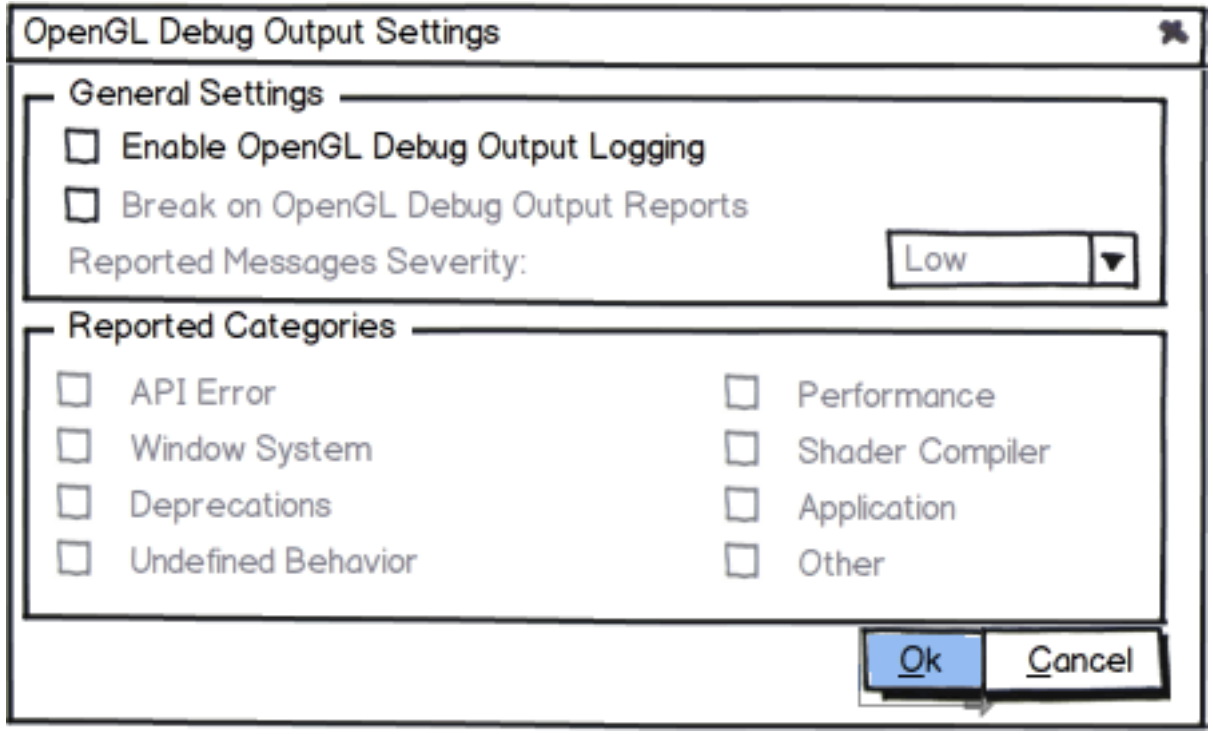
Window
Help
D
P
Ready

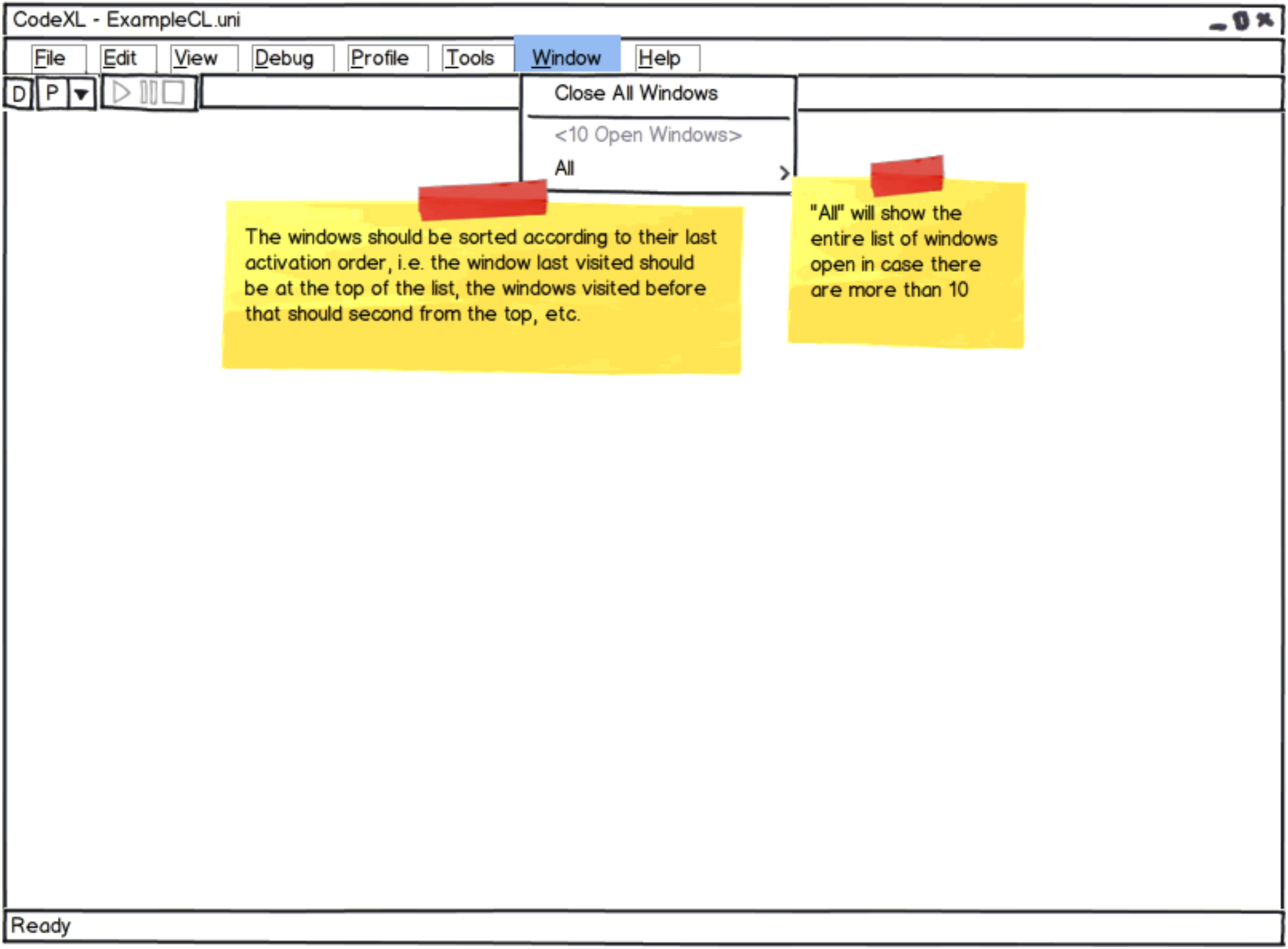

CodeXL - ExampleCL.uni (Debug Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Start Debugging
Debug Mode
Frame Step Ctrl+F11
Draw Step Shift+F10
Step Over F10
Step In F11
Step Out Shift+F11
Break Shift+F5
Stop Debugging F6
Breakpoints
Add / Remove Breakpoints... Alt+Shift+B
Enable all Breakpoints
Debug Settings...
Ready

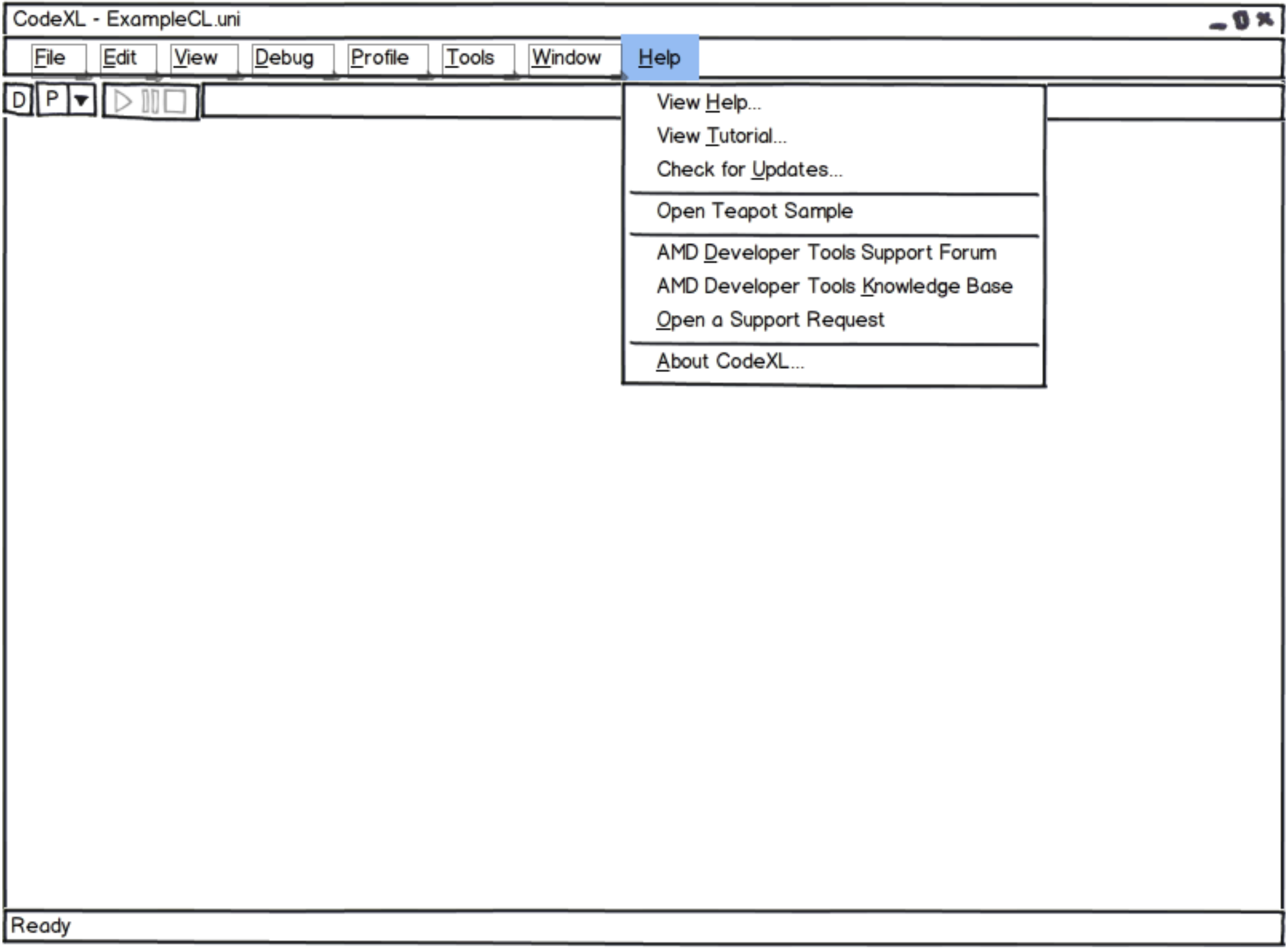

CodeXL - ExampleCL.uni (Debug Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
Start Debugging
Debug Mode
Frame Step Ctrl+F11
Draw Step Shift+F10
Step Over F10
Step In F11
Step Out Shift+F11
Break Shift+F5
Stop Debugging F6
Breakpoints
Add / Remove Breakpoints... Alt+Shift+B
Enable all Breakpoints
Debug Settings...
Debug Explorer
AMDTTeaPot
GL Context1 (Sh
Static Buffer
CL Context1 (Sh
n.cpp
et();
ntf("Building program
h);
>setProgress(msg.str);
_clBuildProgram(
kernel._clProgram,
1,
&devid,
str,
NULL,
NULL);
g = NULL;
pgSize;
etProgramBuildInfo(
Memory
Object Type
Memory
Count
Static
3,596 KB
16
Total
3,596 KB
16
Statistics
Call Stack
Locals
(-) Work Dimensions
(-) Global Work Size {0,1,7}
....
(+) Local
(+) Group Id
<All other kernel locals>
Watch
OpenGL State Variabl
Debugged Process Events
Building OpenCL Program (Conte
DLL Loaded: C:\Users\franksw\A
Could not build OpenCL Program
Building OpenCL Program (Conte
Break
Debugging: 0:0:15 Break at AMDTTeapotOCLSmokeSystem::compute

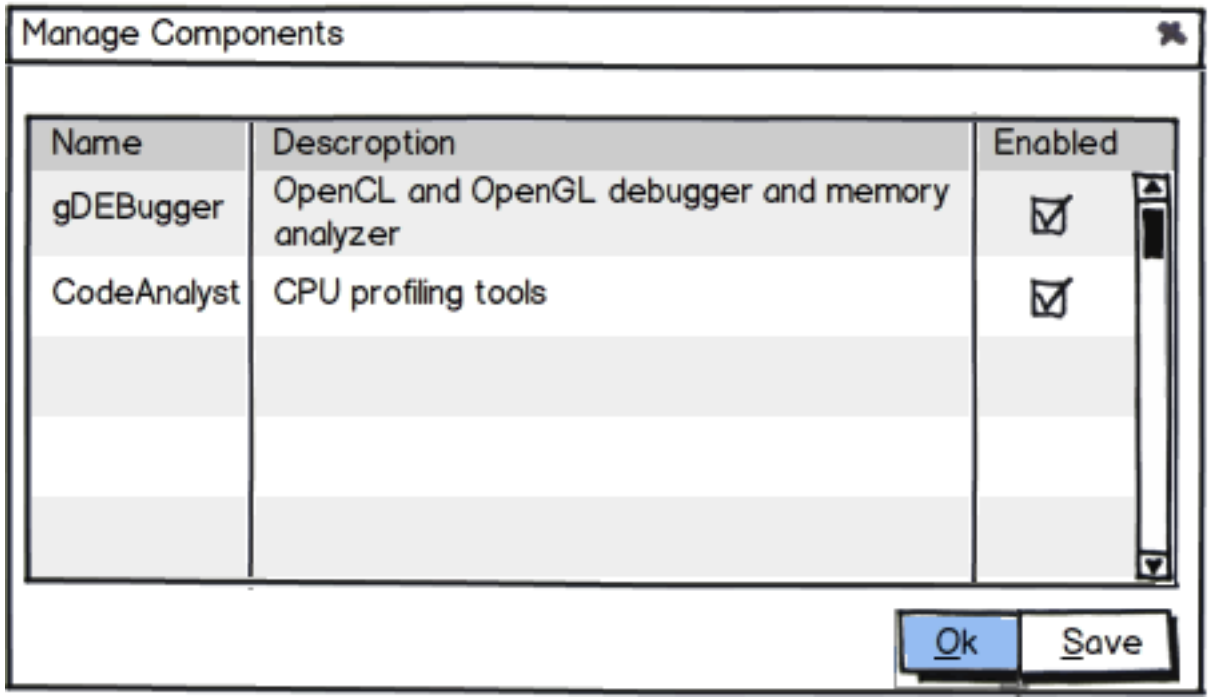

CodeXL - ExampleCL.uni (Debug Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
Start Debugging
Debug Mode
Frame Step Ctrl+F11
Draw Step Shift+F10
Step Over F10
Step In F11
Step Out Shift+F11
Break Shift+F5
Stop Debugging F6
Breakpoints
Add / Remove Breakpoints... Alt+Shift+B
Enable all Breakpoints
Debug Settings...
Break on OpenGL Error Ctrl+E
Break on OpenCL Error
Break on Detected Error
Break on Redundant State Changes
Break on Deprecated Functions
Break on Memory Leaks
Break on OpenGL Debug Output Messages
OpenGL Debug Output Settings...
Debug Explorer
AMDTTeaPot
GL Context1 (Sh
Static Buffer
CL Context1 (Sh
Memory
Object Type
Memory
Count
Static
3,596 KB
16
Total
3,596 KB
16
Call Stack
Locals
(-) Work Dimensions
(-) Global Work Size {0,1,7}
(+) Local
(+) Group Id
<All other kernel locals>
Watch
DLL Loaded: C:\Users\franksw\A
Could not build OpenCL Program
Building OpenCL Program (Conte
Break
Debugging: 0:0:15 Break at AMDTTeapotOCLSmokeSystem::compute


OpenGL and OpenCL Breakpoints
Add a function to the 'Active Breakpoints' list to set it as a debugging breakpoint
Breakpoints
API Functions
Kernel Functions
Error/Warning
clBeginComputationFrameAMD
clBuildProgram
clCompileProgram
clCreateBuffer
clCreateCommandQueue
clCreateContext
clCreateContextFromType
clCreateEventFromGLsyncKHR
clCreateFromGLBuffer
clCreateFromGLRenderbuffer
clCreateFromGLTexture2D
clCreateFromGLTexture3D
clCreateKernel
Add >>
<< Remove
Remove All
Active Breakpoints
Breakpoint Name
Type
Type kernel function
Enable all Breakpoints
Ok
Cancel

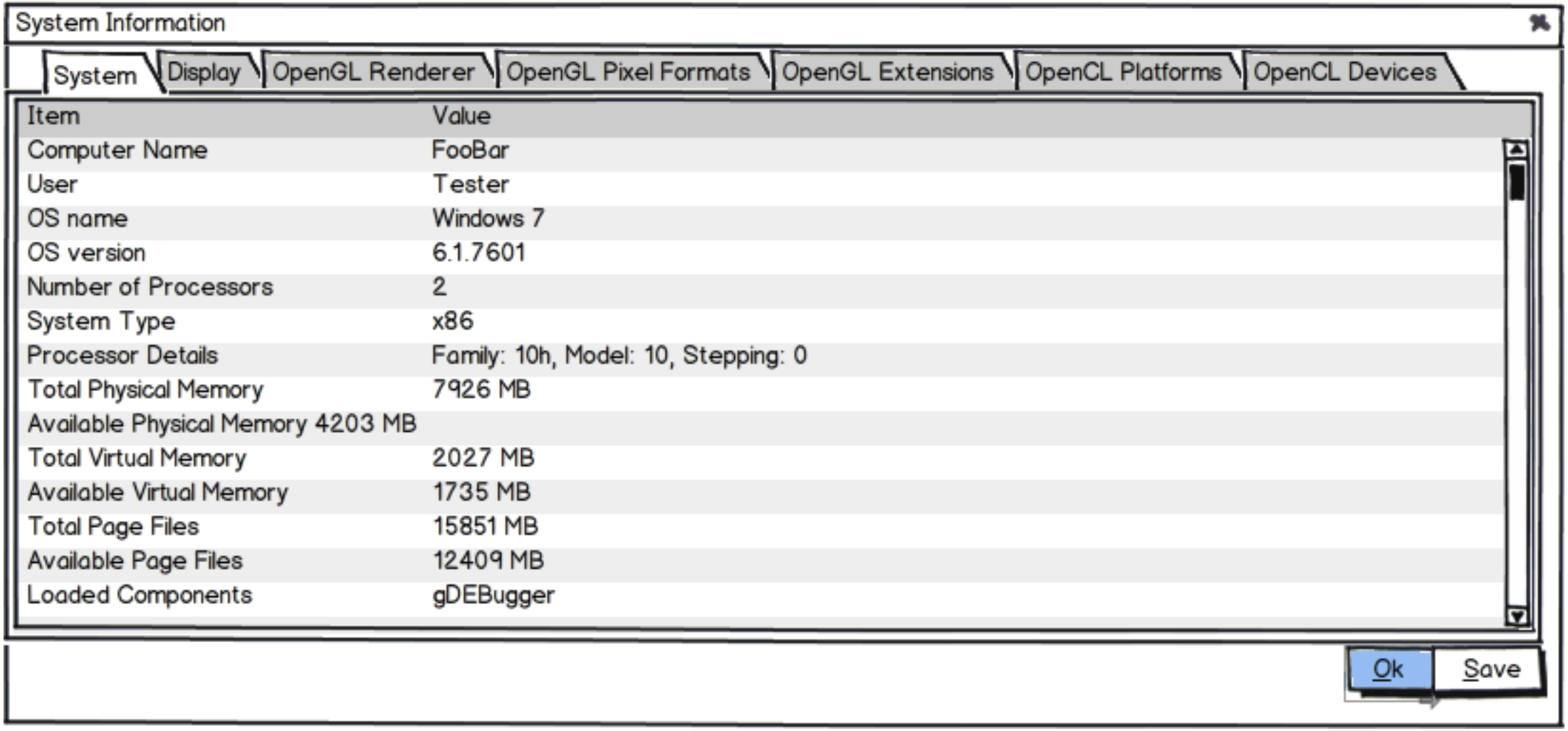

OpenGL Debug Output Settings
General Settings
Enable OpenGL Debug Output Logging
Break on OpenGL Debug Output Reports
Reported Messages Severity:
Low
Reported Categories
API Error
Window System
Deprecations
Undefined Behavior
Performance
Shader Compiler
Application
Other
Ok
Cancel

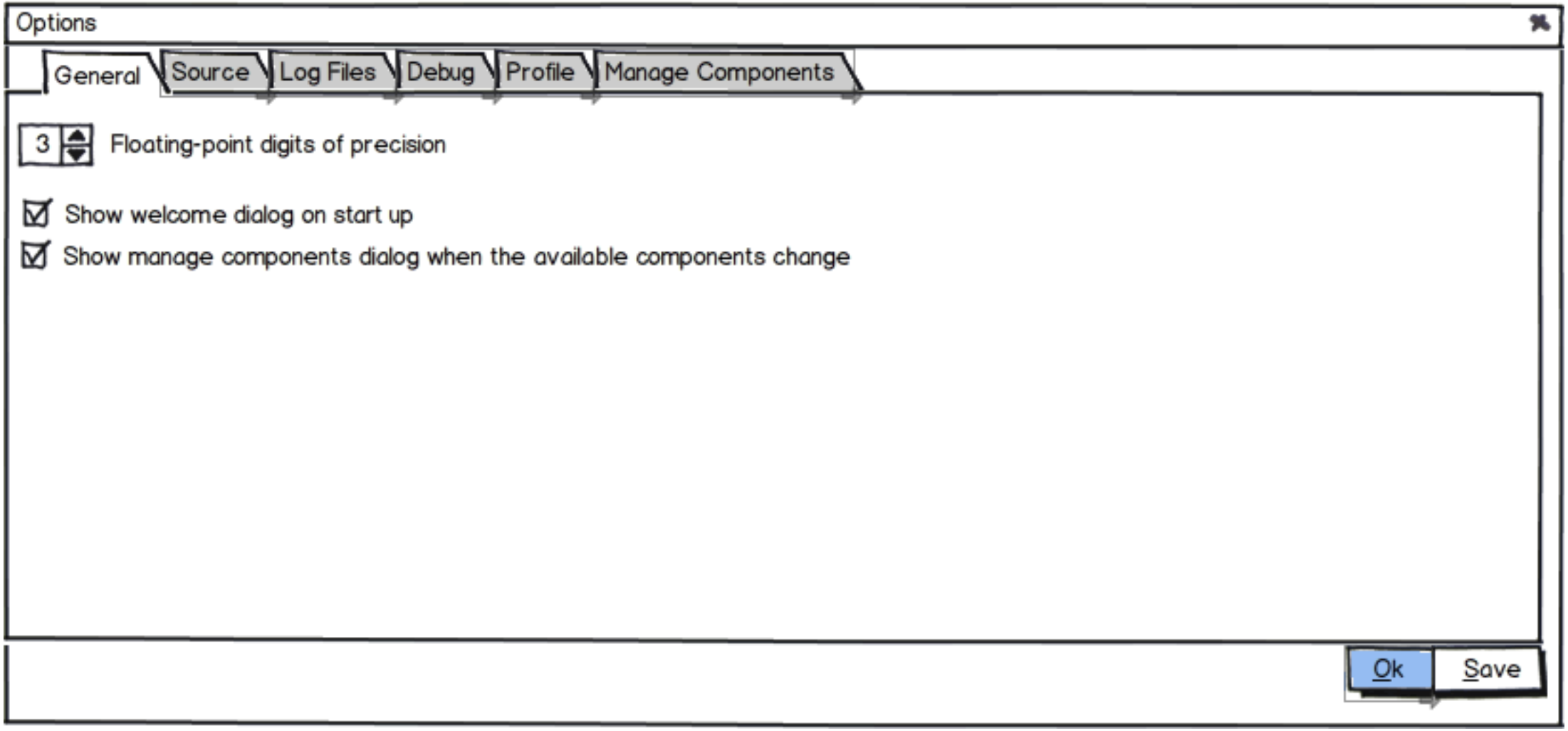

CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
Close All Windows
<10 Open Windows>
All
The windows should be sorted according to their last activation order, i.e. the window last visited should be at the top of the list, the windows visited before that should second from the top, etc.
"All" will show the entire list of windows open in case there are more than 10
Ready

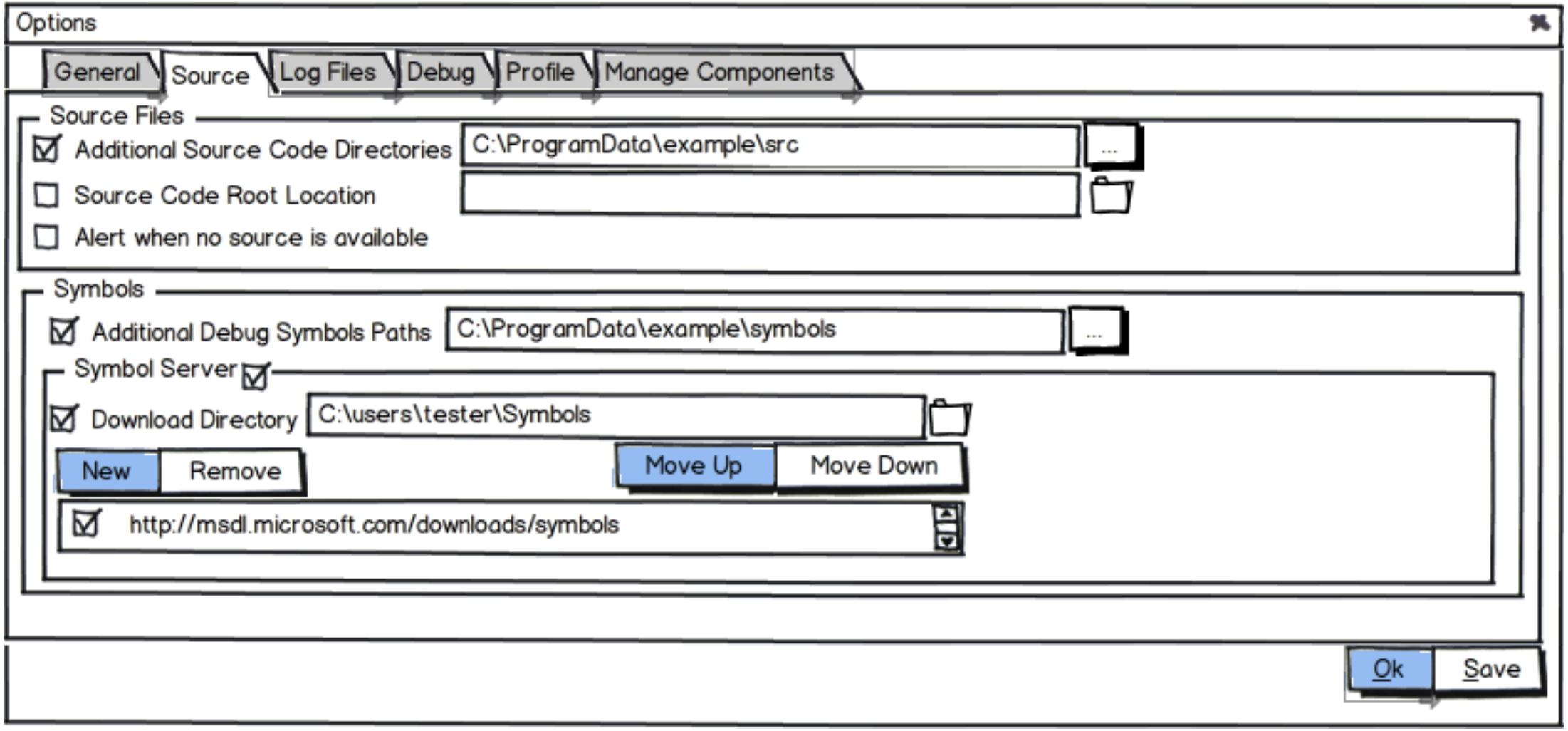

CodeXL - ExampleCL.uni
File
Edit
View
Debug
Profile
Tools
Window
Help
D
P
View Help...
View Tutorial...
Check for Updates...
Open Teapot Sample
AMD Developer Tools Support Forum
AMD Developer Tools Knowledge Base
Open a Support Request
About CodeXL...
Ready

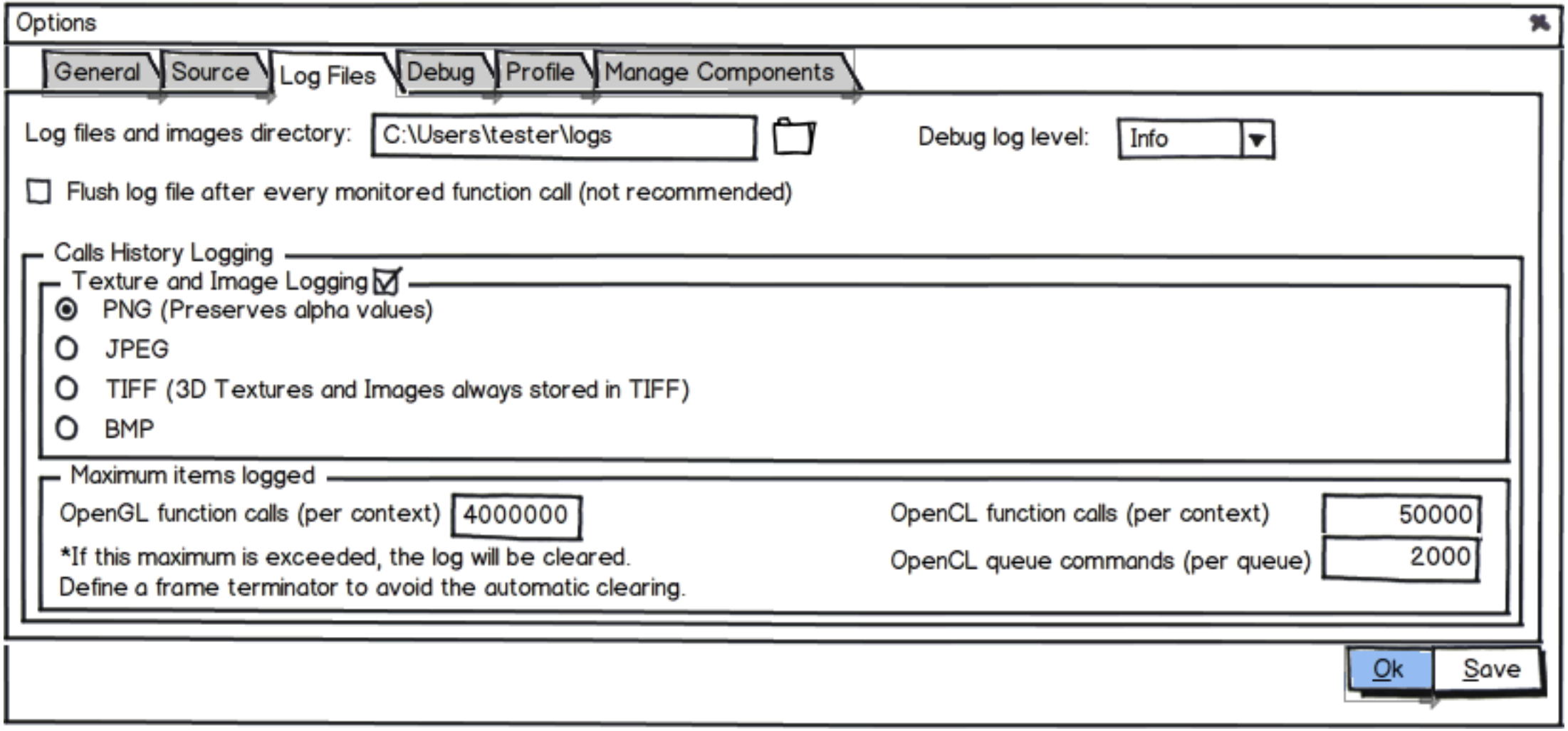


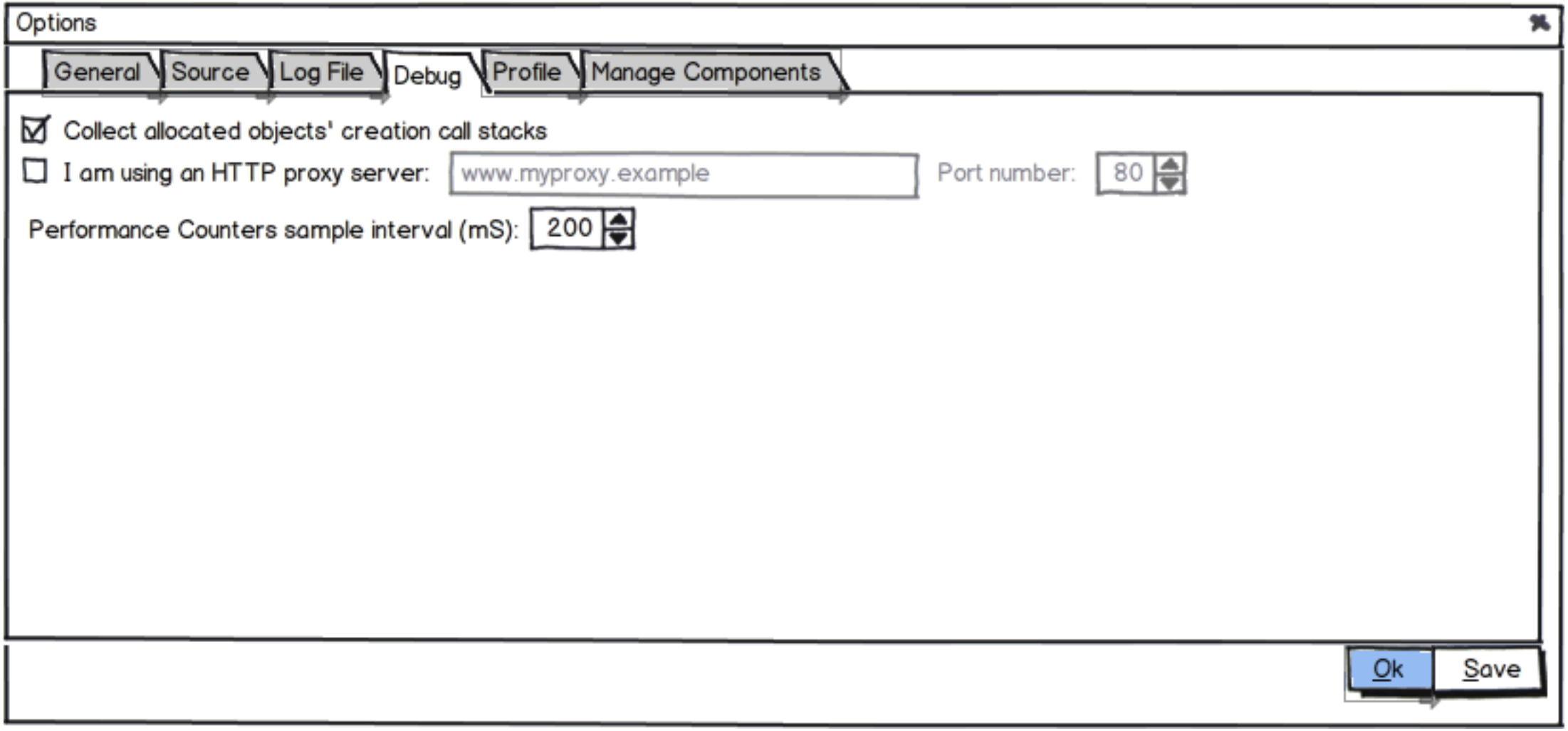
Allows for user control. Also appears after the welcome screen when the available components change.

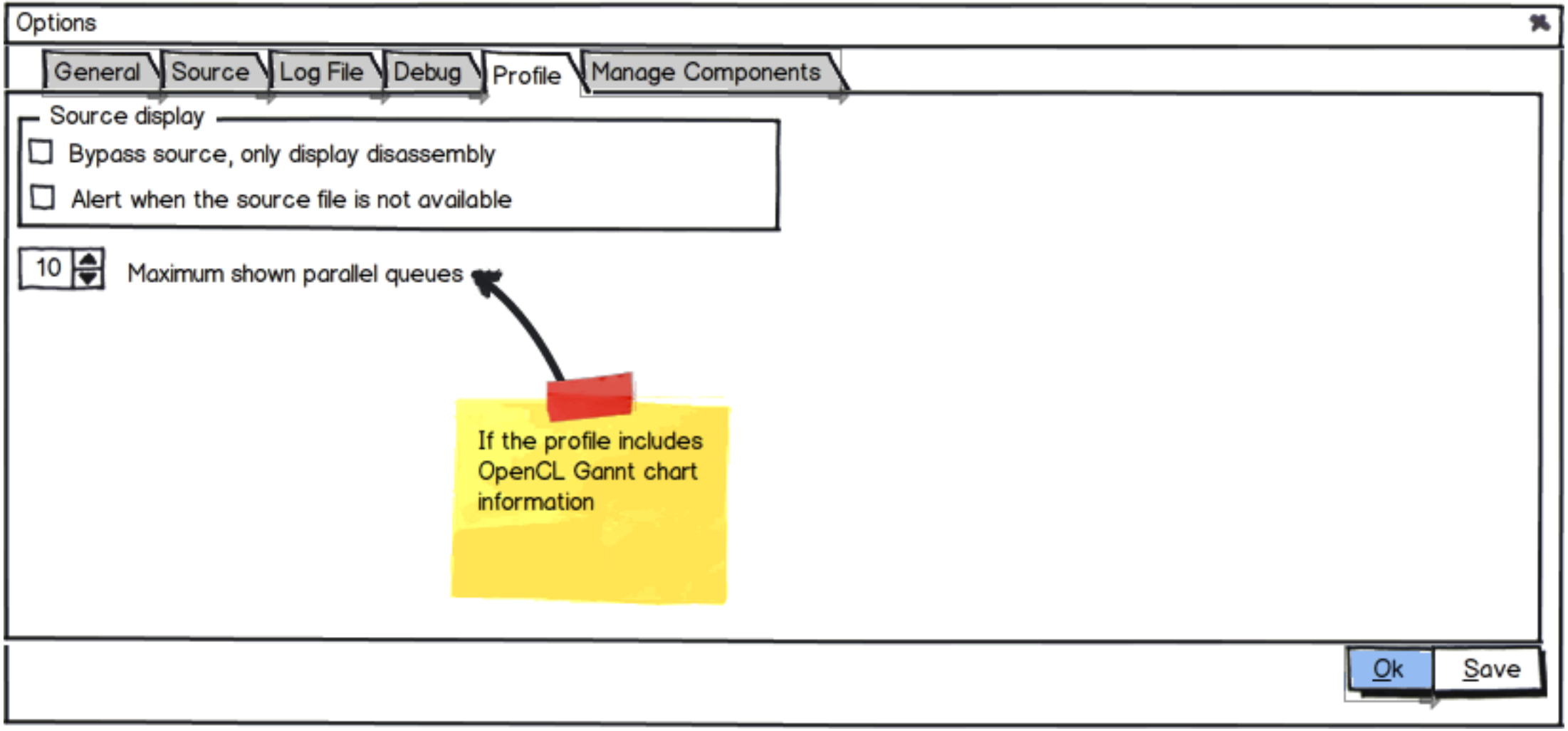

System Information
System
Display
OpenGL Renderer
OpenGL Pixel Formats
OpenGL Extensions
OpenCL Platforms
OpenCL Devices
Item
Value
Computer Name
FooBar
User
Tester
OS name
Windows 7
OS version
6.1.7601
Number of Processors
2
System Type
x86
Processor Details
Family: 10h, Model: 10, Stepping: 0
Total Physical Memory
7926 MB
Available Physical Memory 4203 MB
Total Virtual Memory
2027 MB
Available Virtual Memory
1735 MB
Total Page Files
15851 MB
Available Page Files
12409 MB
Loaded Components
gDEBugger
Ok
Save

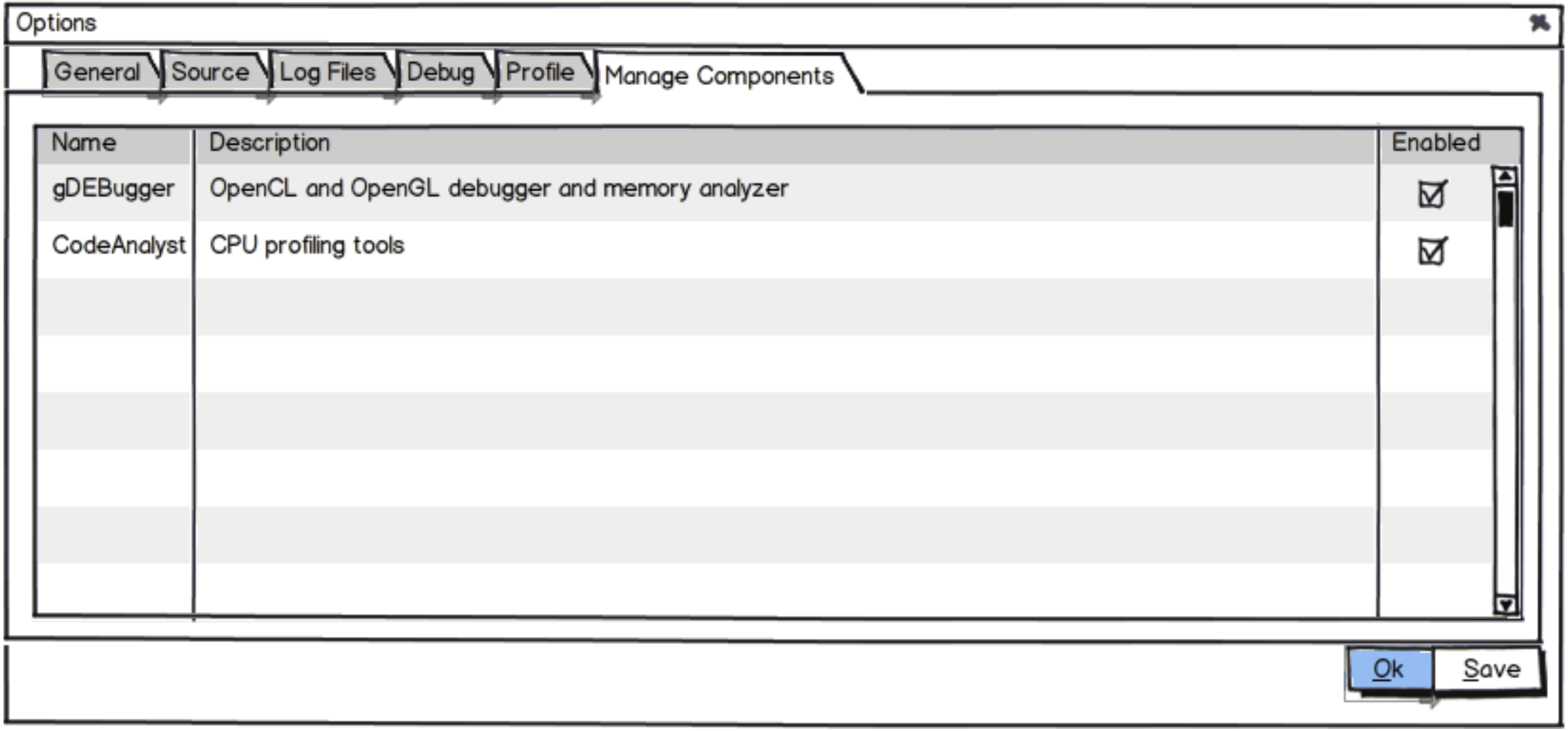

Options
General
Source
Log Files
Debug
Profile
Manage Components
3
Floating-point digits of precision
Show welcome dialog on start up
Show manage components dialog when the available components change
Ok
Save

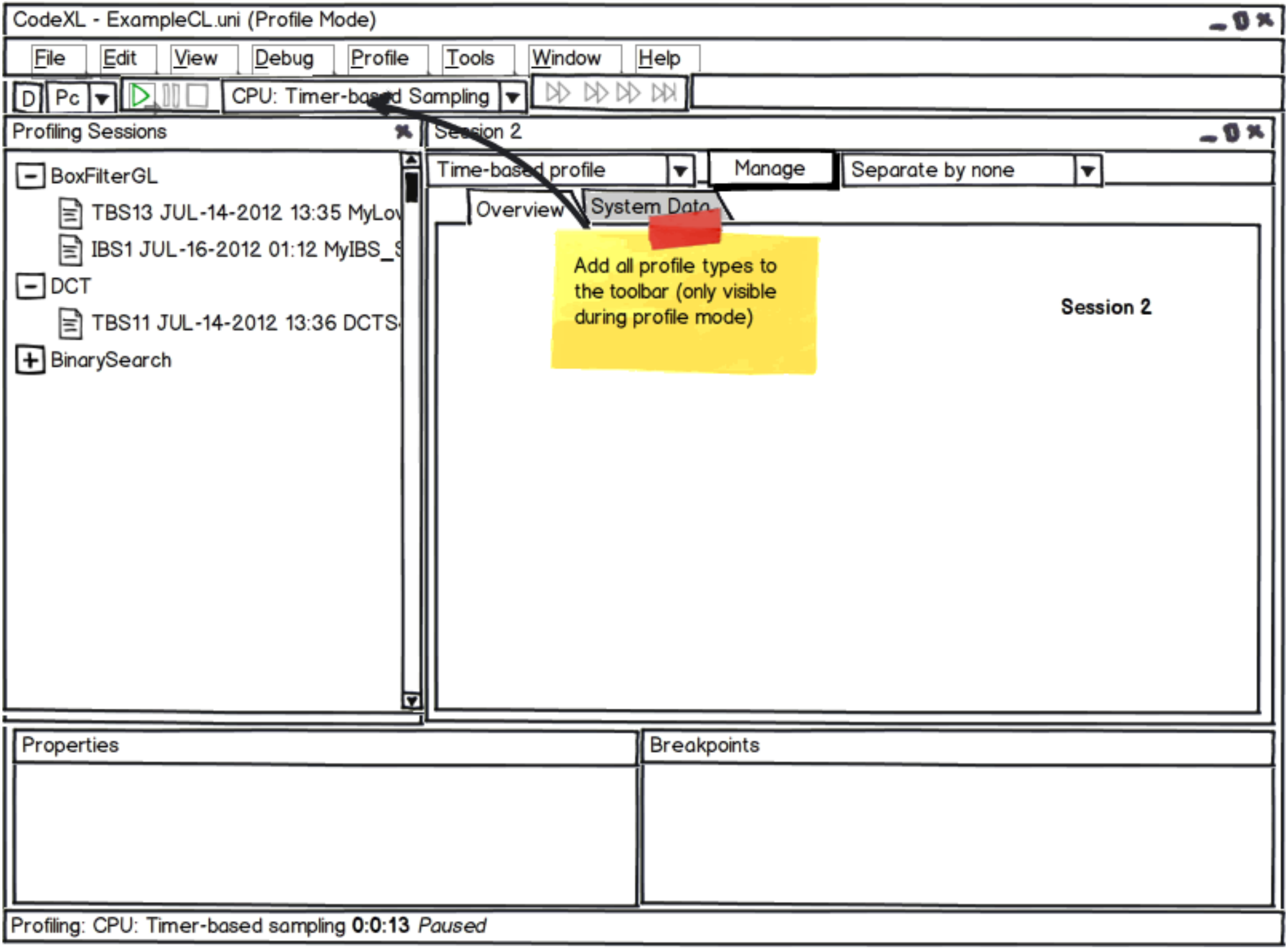

Options
General
Source
Log Files
Debug
Profile
Manage Components
Source Files
Additional Source Code Directories
C:\ProgramData\example\src
...
Source Code Root Location
Alert when no source is available
Symbols
Additional Debug Symbols Paths
C:\ProgramData\example\symbols
...
Symbol Server
Download Directory
C:\users\tester\Symbols
New
Remove
Move Up
Move Down
http://msdl.microsoft.com/downloads/symbols
Ok
Save

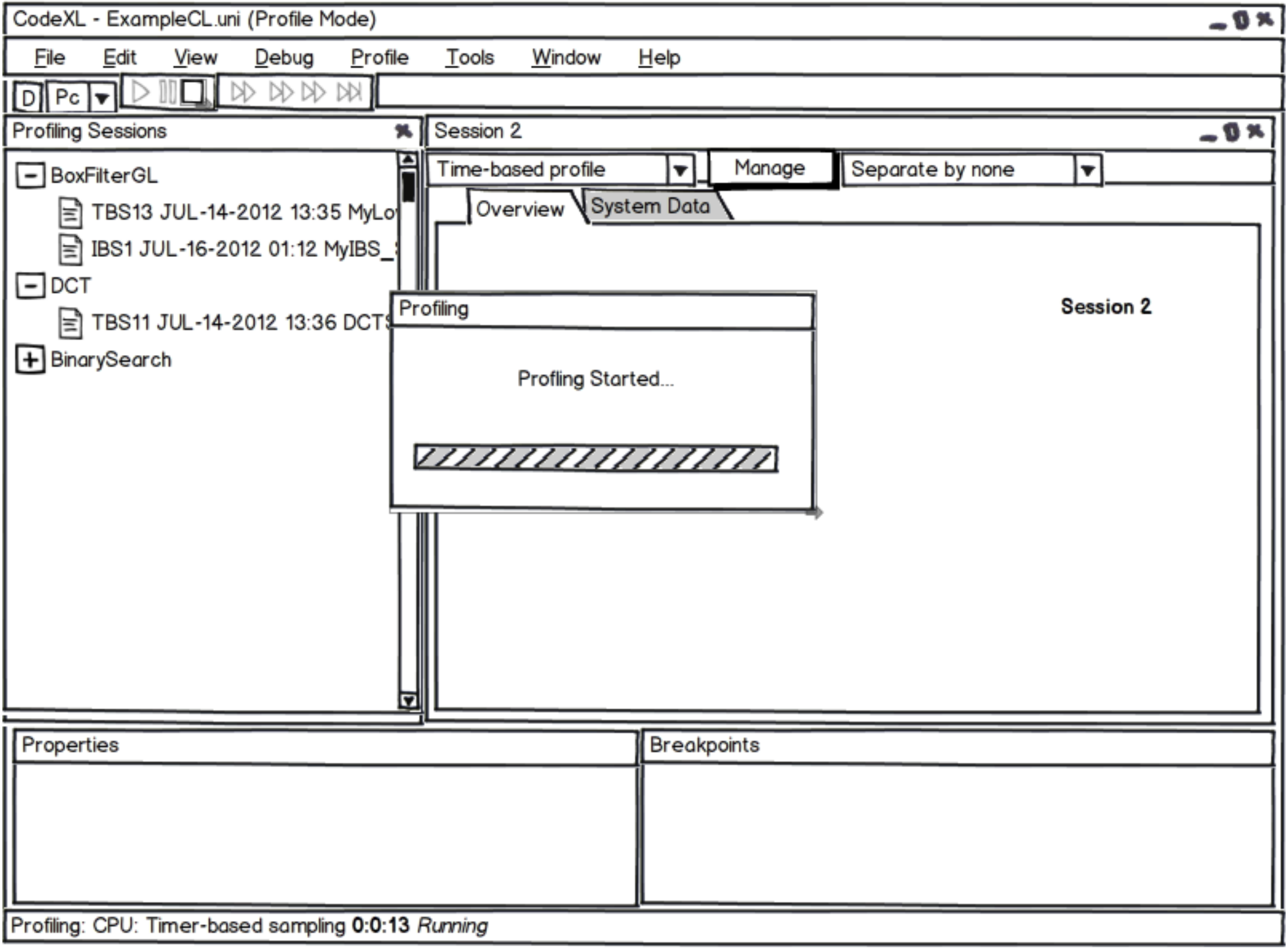

Options
General
Source
Log Files
Debug
Profile
Manage Components
Log files and images directory:
C:\Users\tester\logs
Debug log level:
Info
Flush log file after every monitored function call (not recommended)
Calls History Logging
Texture and Image Logging
PNG (Preserves alpha values)
JPEG
TIFF (3D Textures and Images always stored in TIFF)
BMP
Maximum items logged
OpenGL function calls (per context)
4000000
*If this maximum is exceeded, the log will be cleared.
Define a frame terminator to avoid the automatic clearing.
OpenCL function calls (per context)
50000
OpenCL queue commands (per queue)
2000
Ok
Save

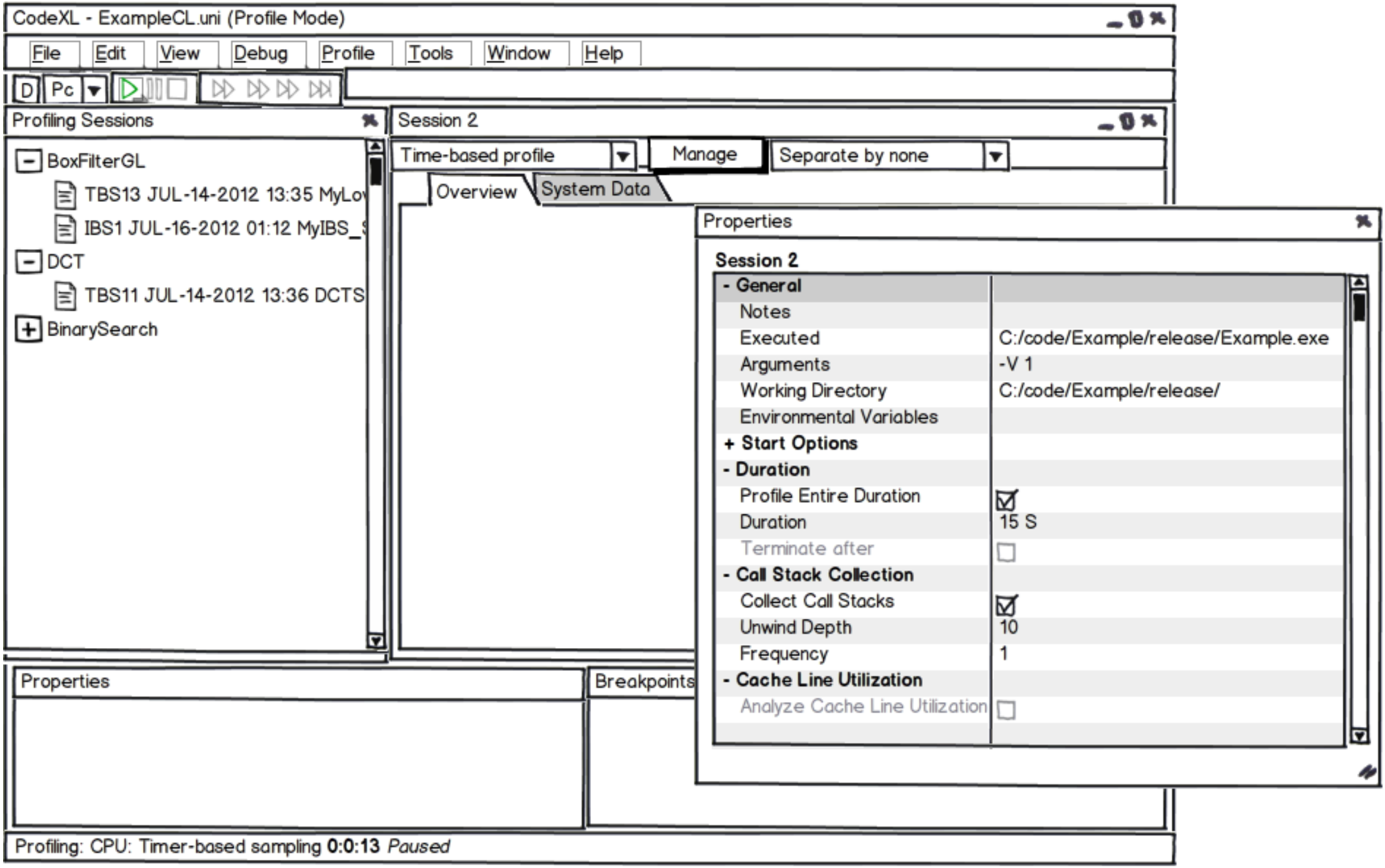

Options
General
Source
Log File
Debug
Profile
Manage Components
Collect allocated objects' creation call stacks
I am using an HTTP proxy server:
www.myproxy.example
Port number:
80
Performance Counters sample interval (mS):
200
Ok
Save

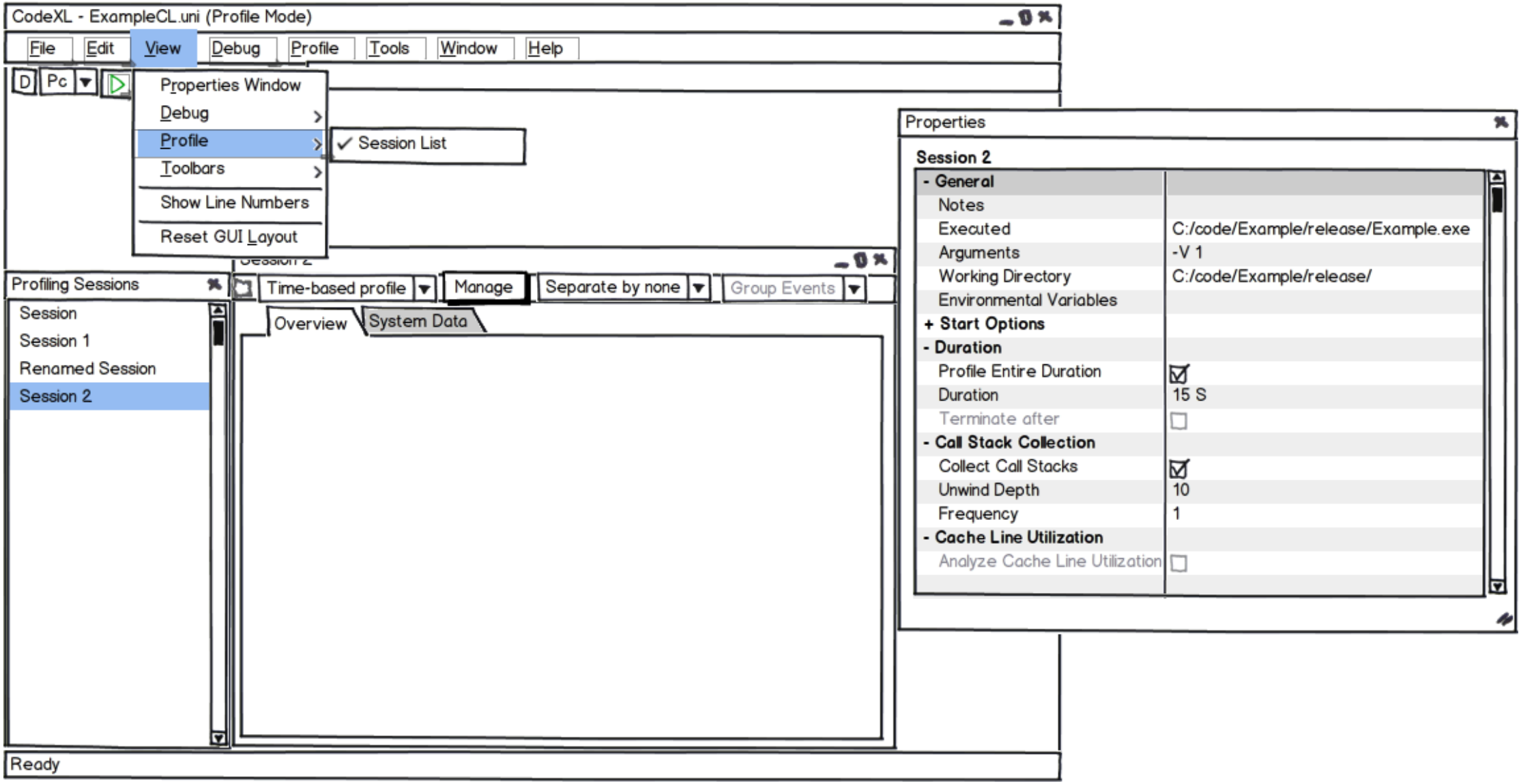

Options
General
Source
Log File
Debug
Profile
Manage Components
Source display
Bypass source, only display disassembly
Alert when the source file is not available
10
Maximum shown parallel queues
If the profile includes OpenCL Gannt chart information
Ok
Save

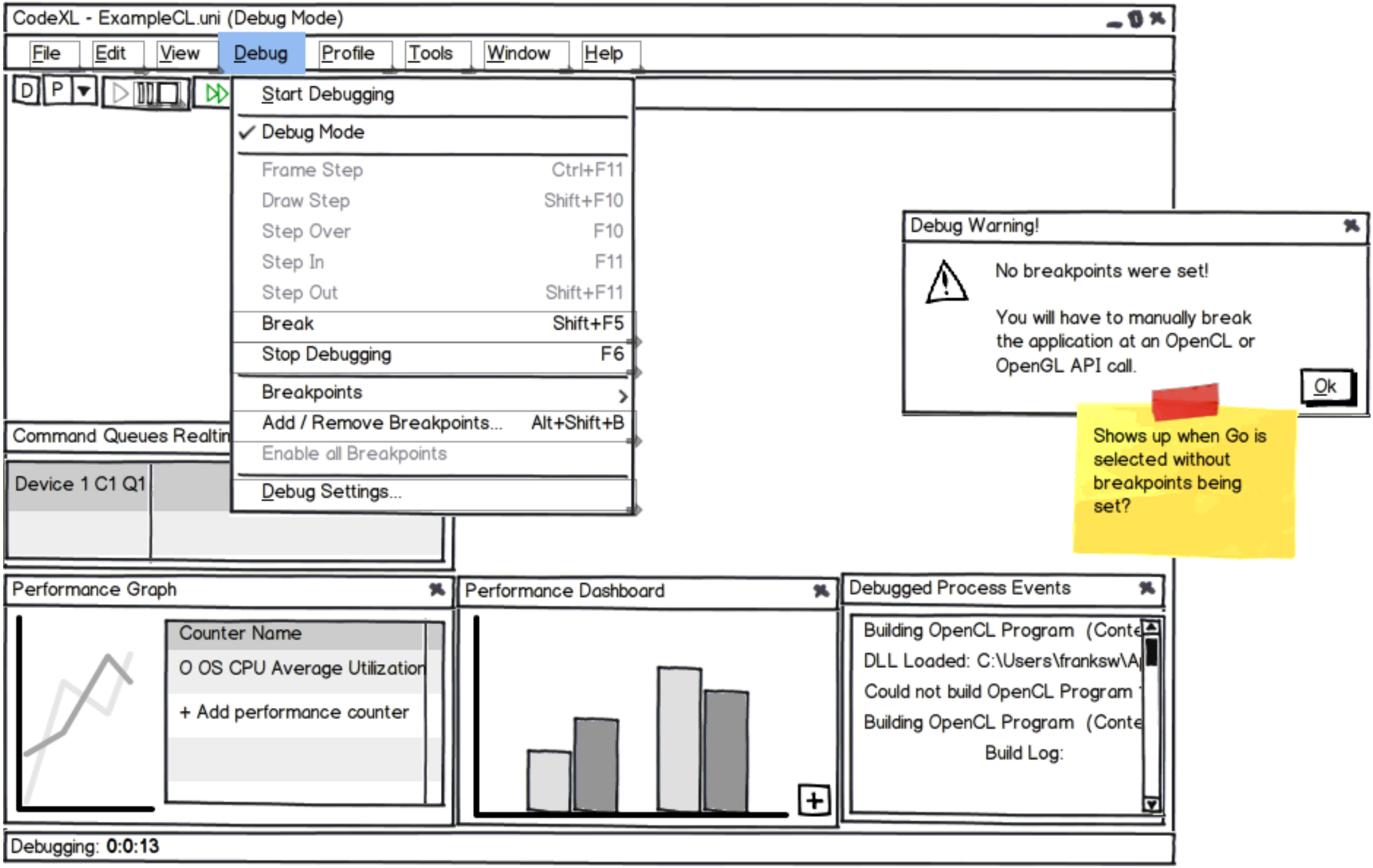

Options
General
Source
Log Files
Debug
Profile
Manage Components
Name
Description
Enabled
gDEBugger
OpenCL and OpenGL debugger and memory analyzer
CodeAnalyst
CPU profiling tools
Ok
Save


CodeXL - ExampleCL.uni (Profile Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
D
Pc
CPU: Timer-based Sampling
Profiling Sessions
BoxFilterGL
TBS13 JUL-14-2012 13:35 MyLo
IBS1 JUL-16-2012 01:12 MyIBS_
DCT
TBS11 JUL-14-2012 13:36 DCTS
BinarySearch
Session 2
Time-based profile
Manage
Separate by none
Overview
System Data
Add all profile types to the toolbar (only visible during profile mode)
Session 2
Properties
Breakpoints
Profiling: CPU: Timer-based sampling 0:0:13 Paused


CodeXL - ExampleCL.uni (Profile Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
D
Pc
Profiling Sessions
BoxFilterGL
TBS13 JUL-14-2012 13:35 MyLo
IBS1 JUL-16-2012 01:12 MyIBS_
DCT
TBS11 JUL-14-2012 13:36 DCT
BinarySearch
Session 2
Time-based profile
Manage
Separate by none
Overview
System Data
Session 2
Profiling
Profling Started...
Properties
Breakpoints
Profiling: CPU: Timer-based sampling 0:0:13 Running


CodeXL - ExampleCL.uni (Profile Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
D
Pc
Profiling Sessions
BoxFilterGL
TBS13 JUL-14-2012 13:35 MyLo
IBS1 JUL-16-2012 01:12 MyIBS_
DCT
TBS11 JUL-14-2012 13:36 DCTS
BinarySearch
Session 2
Time-based profile
Manage
Separate by none
Overview
System Data
Properties
Session 2
- General
Notes
Executed
C:/code/Example/release/Example.exe
Arguments
-V 1
Working Directory
C:/code/Example/release/
Environmental Variables
+ Start Options
- Duration
Profile Entire Duration
Duration
15 S
Terminate after
- Call Stack Collection
Collect Call Stacks
Unwind Depth
10
Frequency
1
- Cache Line Utilization
Analyze Cache Line Utilization
Properties
Breakpoints
Profiling: CPU: Timer-based sampling 0:0:13 Paused


CodeXL - ExampleCL.uni (Profile Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
D
Pc
Properties Window
Debug
Profile
Toolbars
Show Line Numbers
Reset GUI Layout
Session List
Profiling Sessions
Session
Session 1
Renamed Session
Session 2
Time-based profile
Manage
Separate by none
Group Events
Overview
System Data
Ready
Properties
Session 2
- General
Notes
Executed
C:/code/Example/release/Example.exe
Arguments
-V 1
Working Directory
C:/code/Example/release/
Environmental Variables
+ Start Options
- Duration
Profile Entire Duration
Duration
15 S
Terminate after
- Call Stack Collection
Collect Call Stacks
Unwind Depth
10
Frequency
1
- Cache Line Utilization
Analyze Cache Line Utilization


CodeXL - ExampleCL.uni (Debug Mode)
File
Edit
View
Debug
Profile
Tools
Window
Help
Start Debugging
Debug Mode
Frame Step Ctrl+F11
Draw Step Shift+F10
Step Over F10
Step In F11
Step Out Shift+F11
Break Shift+F5
Stop Debugging F6
Breakpoints
Add / Remove Breakpoints... Alt+Shift+B
Enable all Breakpoints
Debug Settings...
Command Queues Realtin
Device 1 C1 Q1
Debug Warning!
No breakpoints were set!
You will have to manually break the application at an OpenCL or OpenGL API call.
Ok
Shows up when Go is selected without breakpoints being set?
Performance Graph
Counter Name
O OS CPU Average Utilizatior
+ Add performance counter
Performance Dashboard
Debugged Process Events
Building OpenCL Program (Conte
DLL Loaded: C:\Users\franksw\A
Could not build OpenCL Program
Building OpenCL Program (Conte
Build Log:
Debugging: 0:0:13