#	Activity Name	Start Date	Finish Date
1	**Cytoscape Retreat**		
2	Hackathon	9/6/04	9/7/04
3	Collaboration Meeting	9/8/04	9/9/04
4	Retreat debriefing, planning	9/10/04	9/24/04
5			
6	**Cytoscape 2.1**		
7	**Development**		
8	**VizMapper**		
9	▲ Node label color control (Nerius)	9/20/04	9/24/04
10	**Graph Model and Operations**		
11	Layout features (Rob, Nerius, Chris W., Rowan)		
12	▲ Layout selected nodes (Nerius, Rowan)	10/4/04	10/15/04
13	▲ Rotate selected nodes (Nerius, Rowan)	10/18/04	10/29/04
14	Edge Direction e.g., Undirected graph option -- This option would change the way certain API functions are handled (e.g. getNeighbors) and data are mapped (e.g. A pp B returns same data as B pp A). (Rob->???)	1/10/05	1/21/05
15	**Data**		
16	External Data [formerly Data Services] (Gary, Ethan, Chris, Mark, John Salama, Alex Pico)		
17	▲ Direct cPath interface, Beta 2 (Ethan)	10/11/04	11/8/04
18	Species bundles (Gary)		
19	Data and menu options (like GenMAPP)		
20	Support for SOFT (Ethan)	10/25/04	11/9/04
21	Support for PSI-MI Level 1 (Ethan)	10/25/04	11/9/04
22	Support for PSI-MI Level 2 (Ethan)	12/27/04	1/7/05
23	Support for BioPAX Level 1 (Ethan)	12/27/04	1/21/05
24	Support for BioPAX Level 2 (Ethan)	12/27/04	1/21/05
25	Support for SBML (Rowan)		
26	cPath Web Service Development, Version 1.0 - an external project, see: http://www.cbio.mskcc.org/cpath/ http://www.cbio.mskcc.org/dev_site/cpath/	10/18/04	11/5/04
27	▲ **Performance**		
28	Goals		
29	Development of a short list of performance measures (Rob)	10/26/04	11/3/04
30	Analysis/Design		
31	Benchmarking, performance characterization (Rob, Mark)		
32	Graph loading (Rob, Mark)	11/5/04 1/19/05	11/11/04 1/21/05
33	Visualization (Rob, Mark)	11/5/04 1/19/05	11/11/04 1/21/05
34	Optimization/Implementation		
35	Performance Optimization of GINY (Nerius)		
36	Analyze run-time behavior and code for areas of improvement (Rob, Mark Nerius, Rowan, all)	11/12/04	12/3/04
37	Implement optimizations (Nerius, Rowan, all)	11/26/04	1/20/05
38	Benchmarking suite	1/10/05	1/21/05
39	**Testing and Docs (Gary, Mark, Ethan, Rob,**		
40	Functional testing		
41	J Unit - organize into test suites (Ethan will manage)	1/7/05	1/13/05
42	Technical documentation (Ethan)		
43	Set-up Maven development site (Ethan)	12/27/04	12/31/04
44	▲ On-line help system (Mark)	9/15/04	9/22/04
45	Creation of developer checklist for new code: javadoc, junit, code review (look for architecture points, easy optimizations, and general style), error checking		
46	Coverage and performance testing		
47	Documentation of complexity (big O notation) for all algorithms in terms of time and memory, nodes and edges		
48	User documentation (Gary will manage)	1/17/05	1/21/05
49	Web site maintenance (Ethan will manage)	1/27/05	2/2/05
50	**Core architectural design / Interoperability (Califano, Mark, Rob)**		
51	▲ Headless mode		
52	Headless mode infrastructure (Nerius)	10/18/04	12/24/04
53	True headless mode (Rowan, Nerius)	10/18/04	11/19/04
54	▲ Progress Bar manager / threading control (Nerius)	10/4/04	10/15/04
55	▲ Threading control (Ethan)	11/22/04	11/30/04
56	Build system (ant) maintenance and management (Ethan)	1/3/05	1/21/05
57	**Bug Fixes**		
58	xxx		
59	**Enhancements**		
60	JAR file dependencies, manifest, nesting		
61	**System Testing**	1/14/05	1/21/05
62	**Release Preparation**		
63	License check of libraries (Ethan)	1/24/05	1/28/05
64	Technical/user/web documentation check (Ethan, Gary)	1/25/05	1/31/05
65	Release documentation (Ethan will manage)	1/3/05	1/21/05
66	RC 1 (Ethan will manage)	1/14/05	
67	RC 2 (Ethan will manage)	1/25/05	
68	**Cytoscape 2.1 Release (FCS)**	2/2/05	
69			
70	**Cytoscape 2.2**	2/14/05	6/3/05
71	**Development**		
72	**VizMapper**		
73	▲ Vizmapper updates (Nerius, Ryan, Ethan, Rod)		
74	Tooltip control (Nerius)		
75	Continuously map edge thickness (Nerius)		
76	Create selected attribute and map it (Nerius)		
77	How to fully vizmap filter results (if c1 then red, else if c2 then green, else stop) (Nerius)		
78	▲ Legend option for vizmapper (Nerius, Ethan)		
79	▲ Attribute to layout co-ordinates (Nerius)		
80	Multiple attribute to viz-mapping (Nerius)		
81	▲ Translucency (Nerius) ??? NEXT RELEASE ???		
82	Split dotted edge from thickness attribute (Nerius)		
83	▲ Saving visual styles explicitly add file location to preferences dialog and whether to append/overwrite f(project file) (Nerius)		
84	Text formatting		
85	Label text wrapping, position, and justification (Rowan, Gary)		
86	Smart formatting		
87	Change the label color to complement the node color (Rowan ?)		
88	Change the label position to minimally conflict with other labels (Rowan)		
89	Visualization modes		
90	Anti-aliasing (Nerius)		
91	Slow/detailed versus fast/abstract (Nerius, Rowan)		
92	**Graph Model and Operations**		
93	Layout features (Rob, Nerius, Chris W., Rowan)		
94	Attribute-constrained layout (Nerius, Rowan)		
95	Background images (Rowan)		
96	Node grouping inside of boxes		
97	Multiple edges		
98	▲ Graph editor (Nerius/Rowan)		
99	Node/edge creation/deletion (Nerius,Rowan)		
100	Node/edge attributes (Nerius,Rowan)		
101	Node/edge visual properties (Nerius, Rowan)		
102	Lockable attributes (Nerius,Rowan)		
103	Library of graph algorithms (like LEDA) put in CVS common repository (Rob)		
104	FindConnectedComponents (Rob)		
105	DFS / BFS		
106	Dijkstra's algorithm / All Pairs Shortest Paths		
107	MinSpanningTree		
108	MaxFlow / MinCut algorithm		
109	▲ Node duplication / identity; f(GraphObjAttributes), node identifies, multiple labels/node		
110	▲ Intersection/Union/Difference between loaded networks		
111	**Data**		
112	External Data [formerly Data Services] (Gary, Ethan, Chris, Mark, John Salama, Alex Pico)		
113	Internal Data		
114	New file formats / CYF format / Project manager (Chris, Mark)		
115	Import formats		
116	Export formats		
117	Native format (saving/restoring project state, etc)		
118	GraphObjAttributes / ExpressionData merging and refactor (Mark)		
119	Most recently-used directories and files (Rowan)		
120	Save all Cytoscape state as a project file (Chris, Rowan)		
121	▲ Refactor attributes browser GUI (Mark)		
122	▲ **Performance**		
123	**Testing and Docs (Gary, Mark, Ethan, Rob,**		
124	Functional testing		
125	J Unit - functional (Ethan will manage)		
126	Technical documentation (Ethan)		
127	Set-up Maven development site (Ethan)		
128	Update, creation of new online help documentation		
129	Creation of developer checklist for new code: javadoc, junit, code review (look for architecture points, easy optimizations, and general style), error checking		
130	Coverage and performance testing		
131	Documentation of complexity (big O notation) for all algorithms in terms of time and memory, nodes and edges		
132	User documentation (Gary will manage)		
133	Web site maintenance (Ethan will manage)		
134	**Core architectural design / Interoperability (Califano, Mark, Rob)**		
135	Abstract Plug-in API (Rob)		
136	Cytoscape API / Integration		
137	▲ Undo and repeat manager (Nerius, Mark)		
138	External cut/paste for networks (Copy as... gif/sif)		
139	▲ Preferences handling and dialog box (Nerius)		
140	Location of various definition files [e.g. visual styles, filter definitions, plugins directory] f(project file) (Nerius)		
141	Default sizes and locations of Cytoscape on the screen (Nerius)		
142	Toolbar customization (Nerius)		
143	Build system (ant) maintenance and management (Ethan)		
144	**Bug Fixes**		
145	xxx		
146	**Enhancements**		
147	yyy		
148	**System Testing**		
149	**Release Preparation**		
150	License check of libraries (Ethan)		
151	Technical/user/web documentation check (Ethan, Gary)		
152	Documentation (Ethan will manage)		
153	RC 1 (Ethan will manage)		
154	RC 2 (Ethan will manage)		
155	**Cytoscape 2.2 Release (FCS)**	6/3/05	
156			
157	▲ High Priority Activities are in RED		

Timeline header (months): Sept 04, Oct 04, Nov 04, Dec 04, Jan 05, Feb 05, Mar 05, Apr 05, May 05

Week markers: 5 12 19 26 3 10 17 24 31 7 14 21 28 5 12 19 26 2 9 16 23 30 6 13 20 27 6 13 20 27 3 10 17 24 1 8 15 22 29