

Courseware
Computer Graphics Collaborative Learning
Web log tracking techniques

(*Microsoft Internet Explorer 5.5 upper, excluding 6.0 sp2*)

- Full Screen HyperCard (Confirmation of browsing)
- Click tracking of user (Cursor movement in IE Browser)
- Timeout timestamp (3 minutes Automatically Logout)
- Referrer timestamp (Record Page codes)
- Full-loaded timestamp (Avoid missing click problem)
- Machine hanging (Shut down the hardware abnormal problem)
- Diminish / Enlarge Platform Window (Synchronous browsing or Learning)
- Delay capture session code (Avoid quick hits problem)

Event types of nature

Nature Code	Functions
A = Concepts	T = Theory F = Platform W = Courseware Information
B = Individual	 Profile  Polling  Self quiz  Submit works
C = Collaboration	 Grouping  e-mail  Meeting room  Forum
D = Technique	V = Video S = Skill
E = eLearning	 Diminish  Enlarge
X = Idle Time	 Logout Timeout

Temporal Database of user-tracking

Event id	User id	Timestamp	Click from	Referrer
22345	101	20030620160000	S21	t12
22346	101	20030620160100	t12	cmi

NB:- S21, t12, ... are HTML page codes.
cmi, cmo, ... are communicative sessions.