Description of Github discourse sample for import into DiscourseDB

For Aug 25th, 2016 Hack day

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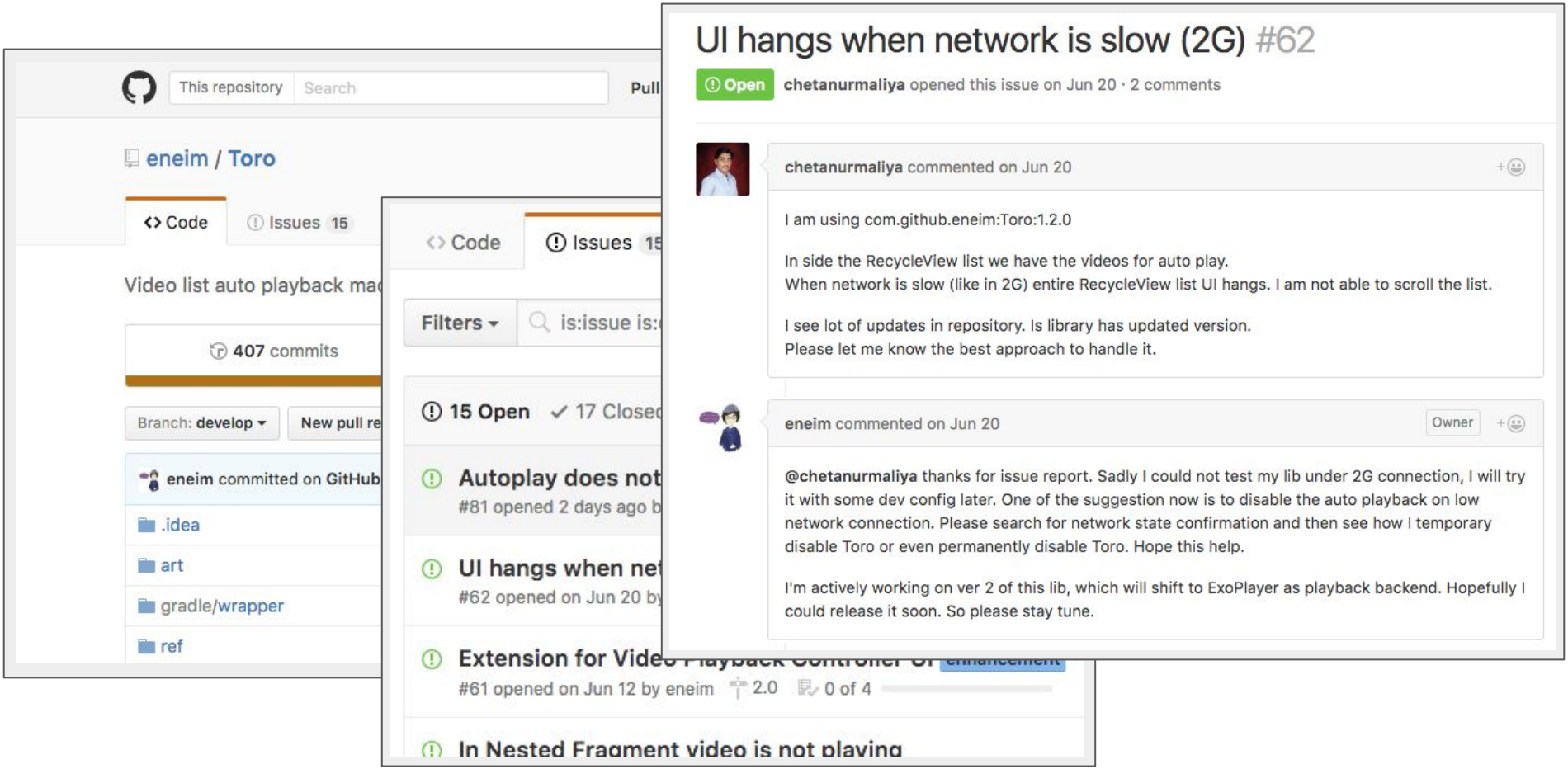
Discussion on github: Owner/projects -> issues -> comments



Format of data

I've extracted some issue data in the form of CSV files containing comments, events, dates, and users; also references to outside URLs and other issues. One file per issue, plus an extra commits.csv file for commits and other non-issue project information.

Header row:

- **rectype,issueid,project_owner,project_name,actor,time,text,action,title,provenance,paths,plus_1,urls,issues,userref,code**

Example data rows:

issue_title,4,eneim,Toro,eneim,2016-02-02 23:21:27+00:00,"**Need to stop a video which ...**",start issue,**Single video playback**,api.github.com,,false,[],[],[],[]

issue_comment,4,eneim,Toro,eneim,2016-02-03 06:40:11+00:00,**Fixed in #7** ,,,api.github.com,,false,[],"[{""raw"": ""#7"", ""refstyle"": ""#d"", ""parts"": [""eneim"", ""Toro"", ""7"", """"]}]",[],[]

Interpretation:

- This is issue #4 in eneim's project called "Toro". User eneim posed the issue, then commented on it
- Issue title and text, and comment text, are all bolded above
- The text "#7" in the comment is a reference to another issue, so the "issues" column has parsed this out.

rectype column values in the Github extract

issue_event, pull_request_history: When issues or pullrequests are merged, closed, opened, etc. Just a timestamp, not much useful data
issue_title: Issue creation date, with title and description
issue_comment: additional comments on issues
pull_request_commit_comment: The comments attached to commits within a pull request.
pull_request_comment: Code review comments in pull requests
issue_crossref, pull_request_crossref: Duplicates issue_comment, in cases where text refers to another issue; but it is labeled by the repo and issue number that is referred *to*, and has the reference info in parseable json format
commit_message: What people type when they check in code
commit_comment: Further comments also attached to a commit later
readme: Contents of the latest commit of the project's designated README file

Columns in Github extract (p. 1 of 2)

rectype: Described on previous slide
issueid: The user-friendly issue or PR number (not internal database index). If this is 0, the file contains project-global things, like commits and readme files
project_owner, project_name: If these are X and Y, they refer to repo http://github.com/X/Y. project_owner could be a person or an organization.
actor: The username of the person who posted the text. May or may not match project_owner.
time: In format YYYY-MM-DD hh:mm:ss+00:00
text: What they wrote, or “None” or “missing comment”
action: What kind of event for issue_event or pull_request_history: e.g. opened, merged, etc.

Columns in Github extract (p. 2 of 2)

title: Issue title (in issue_title rows), description of referrer (in issue_crossref)
provenance: ghtorrent or githubarchive: where I got the data from
parts: For commits only, this says which files were edited
plus_1: TRUE if the comment begins with “+1”
urls: JSON-formatted list of URLs referenced in the text
issues: JSON-formatted parsing of cross-reference; e.g. [{"raw": "#10", "refstyle": "#d", "parts": ["Yelp", "swagger_spec_validator", "10", ""]}]
userref: JSON-formatted parsing of user name reference e.g. ["@dnephin"]
code: JSON-formatted list of languages that are literally quoted in the text, e.g. [“python”] if the text has ```python

When doing the exercise, don’t forget:

Check out http://github.com/discoursedb/discoursedb-github-workshop

Create a custom.properties file, and substitute your own name in the database name

Set a dataset name and directory (src/main/resources/data) as Run Configuration arguments

Fill in TutorialConverterService.java and TutorialConverter.java

Data format is csv, but some columns are embedded JSON.

http://tutorials.jenkov.com/java-json/jackson-objectmapper.html

Hints! Random lines of code from the solution

```
@Autowired  private DiscoursePartService discoursePartService;
Contribution contrib = contributionService.createTypedContribution(ContributionTypes.THREAD_STARTER);
contrib.setStartTime(currentComment.getTime());
discoursePartService.addContributionToDiscoursePart( ...
Discourse curDiscourse = discourseService.createOrGetDiscourse("Github");
DiscoursePart issueDP = discoursePartService.createOrGetTypedDiscoursePart(..., DiscoursePartTypes.GITHUB_ISSUE);
import edu.cmu.cs.lti.discoursedb.core.model.user.User;
import edu.cmu.cs.lti.discoursedb.core.service.macro.ContentService;
import edu.cmu.cs.lti.discoursedb.tutorial.model.GitHubIssueComment;
public long mapIssueComment(GitHubIssueComment currentComment) {
switch (currentComment.getRectype()) {
```