

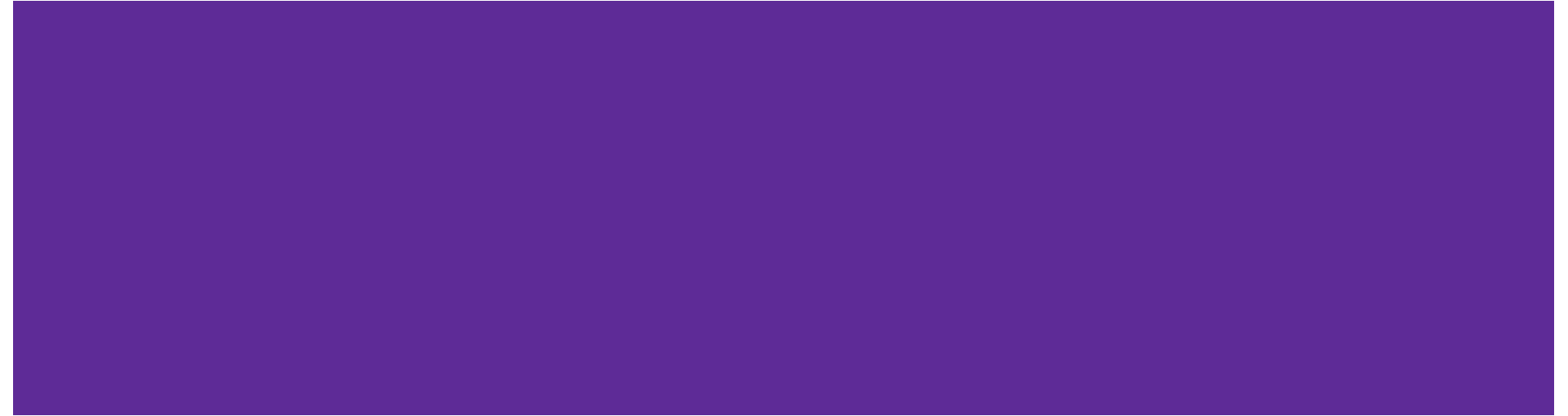
Perusall

Nate Lillich
Nathan Herscovici
Nicholas Sternecker
Gibson Williams



What is Perusall?

A web app that is built to work with students on socially annotating reading and listening assignments.



Why use Perusall?

Know how much your students actually engage with the assignment

Case study using a similar tool for social annotation learning:
https://www.sciencedirect.com/science/article/pii/S1096751612000802?ref=pdf_download&fr=RR-9&rr=81f4db5fb8f04dea

Benefits of Perusall

Allows teachers to help students understand content material by gauging how long they spent on the readings/content material



Perusall's features

- Grade passback
- Discussion type comments
- Annotating code
- Students can answer other students
- Automatically detects quality and engagement on the assignments
- Group Creation
- Anonymous commenting
- Private notes







Auto grading options

Full credit

Perusall's features














Specific assignment grade breakdown

Grade K-State CIS 642_643 Textbook - Pages 1-11, due October 25, 2023 11:30 am CDT

Engagement metrics		Comments submitted	
Metric	Details		Score for this metric
Comment content	11 comments submitted (11 before deadline, 69 words, average 6.27 words per comment)		= 0% out of 0%
Opening assignment	Opened assignment 14 times	1/3 of max possible score each time assignment is opened before the <i>final.deadline</i>	$14 \times \frac{1}{3} \times 20\%$ = 20.0% out of 20% 
Reading to the end	Read 100% of content before the <i>final</i> deadline		$100\% \times 40\%$ = 40.0% out of 40% 
Active engagement time	25.18 minutes of active time	1/10 of max possible score for each minute of active time spent before the <i>final.deadline</i>	$25.18 \times \frac{1}{10} \times 30\%$ = 30.0% out of 30% 
Getting responses	4 comments that elicited a response	1/3 of max possible score for each comment before the <i>final.deadline</i> that elicits a response	$4 \times \frac{1}{3} \times 30\%$ = 30.0% out of 30% 
Upvoting	2 comments that were upvoted 1 upvote made on others' comments	1/5 of max possible score for each upvote received before the <i>final.deadline</i> ; 1/5 of max possible score for each upvote given before the <i>final.deadline</i>	$(2 \times \frac{1}{5} + 1 \times \frac{1}{5}) \times 30\%$ = 18.0% out of 30% 
Quizzes	0 questions answered correctly		
Total			138.0% 

Perusall's features

Audit of reported inappropriate comments

Submission	Issue	
<div>NS</div> <div>the programs and other operating information used by a computer</div> <div>   Oct 25 10:03 am</div>	Content was pasted into comment: 	<div>the programs and other operating information used by a computer</div> <div> Take action ▾</div> <div>Informational only; comment still counts towards score</div>
<div>NS</div> <div>nuh uh nuh uh</div> <div>   Oct 25 10:20 am </div>	May not be valid English	<div> Take action ▾</div> <div>Informational only; comment still counts towards score</div>
<div>NH</div> <div>10/10 quality</div> <div>  Oct 25 10:23 am</div>	Flagged as inappropriate	<div>Flagged by Nicholas Sternecker - "Dude get your own comments"</div> <div> Take action ▾</div> <div>Comment does not count towards score</div>

✓ Ignore

Select this option if there is nothing wrong with the comment.

🚩 Flag as inappropriate

Select this option to flag the comment and prevent its author from earning credit for it.

🔒 Flag as inappropriate and assign a zero for the assignment

Select this option to flag the comment and assign the lowest possible assignment score to the assignment(s) the comment appears in.

Perusall's features

Code annotations

```
total_inserted = 0
state = "A"
drink_1 = 2
drink_2 = 4
drink_3 = 1
drink_cost = 1.5

if total_inserted == 0:
    print("Amount inserted ${:,.2f}".format(total_inserted))

while state != "G":
    if state == "A":
        total_inserted = 0
        s = input("type start, or exit: ")
        if s == "Start" or s == "start":
            state = "B"
        elif s == "Exit" or s == "exit":
            state = "G"
        else:
            continue
    elif state == "B":
        insert = input("Insert an amount: ")
        if insert == "refund" or insert == "Refund":
            state = "E"
        elif float(insert) >= 0:
            print("Amount inserted ${:,.2f}".format(float(insert)))
            total_inserted += float(insert)
        else:
            print("invalid amount")
        if total_inserted >= drink_cost:
```

Problems with Perusall

- Students can flag other comments as inappropriate content
- No editing of content
- Little assignment creation tools within Perusall
- Name of assignment in Perusall and Canvas must be the same
- Quality and engagement can be spoofed

API Calls



User Collection

```
1  {
2    {
3      "_id": "MNZtvxJYmY5GQ4w6z",
4      "firstName": "Nicholas",
5      "lastName": "Sternecker",
6      "email": "nsternecker@ksu.edu"
7    },
8    {
9      "_id": "QrALMiztKSx3YzDTv",
10     "firstName": "Student",
11     "lastName": "Gibson",
12     "email": "gibson.williams2020@gmail.com"
13   },
14   {
15     "_id": "ba8FE5bnAZtB6x254",
16     "firstName": "Nate",
17     "lastName": "Lillich",
18     "email": "nlillich@ksu.edu"
19   },
20   {
21     "_id": "jdGGwy2z58RCrmQCh",
22     "firstName": "Nathan",
23     "lastName": "Herscovici",
24     "email": "nherscovici@ksu.edu"
25   },
26   {
27     "_id": "yjj6ngEo5ybTevTDag",
28     "firstName": "Gibson",
29     "lastName": "Williams",
30     "email": "gibbs060502@ksu.edu"
31   }
32 }
```

Individual Student Collection

```
1  {
2    "_id": "QrALMiztKSx3YzDTv",
3    "firstName": "Student",
4    "lastName": "Gibson",
5    "email": "gibson.williams2020@gmail.com",
6    "studentCourseIds": [
7      "vv3ooxA3SCsHDpiRc"
8    ],
9    "instructorCourseIds": []
10 }
```

Individual Instructor Collection

```
1  {
2    "_id": "yj6ngEo5ybTevTDag",
3    "firstName": "Gibson",
4    "lastName": "Williams",
5    "email": "gibbs060502@ksu.edu",
6    "studentCourseIds": [],
7    "instructorCourseIds": [
8      "BRhk8oFtsmnsBHKo4",
9      "vv3ooxA3SCsHDpiRc"
10   ]
11 }
```

```
1  {
2    "_id": "jdGGwy2z58RCrmQCh",
3    "firstName": "Nathan",
4    "lastName": "Herscovici",
5    "email": "nherscovici@ksu.edu",
6    "studentCourseIds": [
7      "BRhk8oFtsmnsBHKo4"
8    ],
9    "instructorCourseIds": []
10 }
```

**Collection of a student then
collection of groups. The IDs match
showing that student is in the group**

```
{
  "number": 1,
  "auto": false,
  "studentIds": [
    "jdGGwy2z58RCrmQCh"
  ]
},
```

```
1  [
2      {
3          "id": "LjyHqGeBEqnCLEAwz",
4          "studentId": "jdGGwy2z58RCrmQCh",
5          "text": "<p>No Mallocing</p> <p>:thumbsdown:</p>",
6          "plainText": "No Mallocing :thumbsdown:",
7          "score": 0,
8          "createdAt": "2023-10-27T15:18:33.752Z",
9          "editedAt": "2023-10-27T15:18:51.748Z"
10     }
11 ]
```

**Collection of
annotations from a
specific assignment**

Student features

- Textbook functionality, with ability to take notes and highlight sections either for clarifications or questions
- Ability to see homework assignments with due dates, as well as a summary of what you have done on the assignment so far
- Grade tab with assignment grades, assuming they have been released by the professor. Comments per assignment can be downloaded [here](#)
- A global course note tab gives all notes for the course and can be organized by date
- Can be connected to personal calendar
- Text in assignments can be highlighted to ask a question or leave a clarification
- Annotations can be left on figures/images (or anywhere on the page) so you are not limited to leaving comments on text
- Comments/questions can be seen and answered by other students, as well as teachers
- Comments/questions can be upvoted, starred, and replied to by other students or teachers
- Citations can be generated for a specific portion of the textbook
- There is an announcement and General discussion board similar to canvas
- There is the ability to privately message other students or teachers, which can be disabled by the teacher
- There is the ability to create a private group of students
- Notes and comments stay with the student as long as they are using Perusall, so they can come back to notes and comments once they are out of the class
- There is a hashtag section that allows students to tag them in comments so it will pop up in those hashtags
- Flagging a comment/question as inappropriate/plagiarism just removes it and sends the offending comment to the teachers along with some of the flagger's reasoning
- When sent through canvas only allows the student to see and complete the given assignment offered

Teacher Features

- Teachers have all the same functionality of students with the addition of:
 - Gradebook for viewing and editing students grades
 - Access to settings
 - Ability to export data
- Creating new assignments
 - Can add specific content to be assigned
 - Set deadlines for assignments and make assignments visible at a certain date
 - Add special instructions for an assignment
 - Assign assignments to entire class, specific students, specific groups, or entire class excluding certain students
 - Option to have anonymous posting
 - Ability to let students decide if their post is anonymous
 - Require all comments to be anonymous
 - Require all posts to be public
 - Set assignments to optional
 - Send email reminders if an assignment is not completed
 - Use custom settings for grading an assignment or the course grading settings
- Gradebook
- Students
- Export Data

