Additional Resources

The following are additional resources provided by the client that we think are helpful for the development of this project

- Available data from Canvas API:
    - output.json
    - the page views and participation by any student in the course
    - query audit log of authentication events (logins and logouts' time)
    - when the page was visited and the estimated time spent on the page in seconds
    - a list of conversations for the user
    - get the submission time and date of the assignment
    - get the submission time and date of the quizzes
- A paper about learning analytics dashboards:
    - describes the journey of the developers while developing the student-facing dashboard,
    - may provide insight into decisions to be made and important considerations
    - Bodily2018_Article_TheDesignDevelopmentAndImpleme.pdf

A list of candidate metrics[1] that could be used in the dashboard

Metrics
the number of visits to all subjects
the total number of visits for each page for a subject
the time spent on each page for a subject
the total number of attempts I have made and the deadline for my upcoming assignment
the total number of attempts I have made for my exercise quizzes
the start time for my upcoming assessment quiz
the number of sessions and session duration
the total number of discussion posts I created and the replies I got
the number of unread announcements
the number of unread posts on the discussion board

[1]: some of these metrics are not directly available from Canvas. Additional processings on the raw data retrieved from Canvas API are required.