## **Project 1**

In this project, each group is expected to develop a specialized R program to crawl, parse and extract all articles published in a specific journal. Please refer to **Summary.xlsx** for assigned journals.

Given a journal, your R code should be capable of fetching html pages of all articles automatically. For each article, you are required to extract the following **10 fields**:

DOI, Title, Authors, Author Affiliations, Corresponding Author, Corresponding Author's Email, Publication Date, Abstract, Keywords, Full Text (Textual format). Extracted information should be written into a plain text file (one row per article and one column per field). If any columns are not available, please mark them as NA (don't leave them blank).

Your final submission should be a compressed file including 4 folders:

- 1. all related R scripts and a file readme.txt specifying the functionality of each R script
- 2. crawled html pages of all articles, the name of each article is DOI.html (e.g., 10.1371/journal.pgen.1005958.html)
- 3. one plain text file with the aforementioned **10** fields, its name should be JOURNAL\_NAME.txt (e.g., PLOS Genetics.txt). **One R script to read the delivered plain text file.**
- 4. one PDF file for respective contributions of group members and major challenges you have addressed.

## **REMAKRS:**

- 1. Please focus on the journal **assigned to your group**, otherwise no credits.
- 2. GroupID and group members are given as follow:

Group ID	S1	S2	S3
1	Connor Watson	Shreyas Patil	Xueyang Fan
2	Manjari Bharti Jathania	Mohit Patel	Jinal Shah
3	Alfred Zane Rajan	Jeremy Hui	
4	Sandesh Sanjay Bhaiswar	Jignasha Machhi	Vivek Pereira
5	Priyanka Pandya	Dhrumil Shah	Michelle Reid Jones
6	Elizabeth Daudelin	Aradhya Pratap Singh Chouhan	
10	Shasank Jabade	Ravali Sri Kodali	Ujalaben Patel
8	Aditya Chavan	Olawale Olaiya	
9	Pei ju Tsai	Chung-yun Fang	
11	Chhavi Tyagi	Phornthip Simsaen	

3. Splitting the whole project into two procedures might be more feasible as per my experience. The first phase: crawling all articles and saving them as html files. The second phase: parsing, extracting 10 different fields and delivering the final plain text

file. This is only my personal suggestion rather than requirement.

4. A sample code for parsing html pages is also given as your starting point.