COP 4710

Project Stage 2

The name of the project we would like to work on is Intellectual Property Licensing Network (IPLiN for short). The two primary uses for IPLiN would be to:

1. Store/Archive various forms of intellectual property (patents, trademarks, copyrighted material) and associate them with their owners.
2. Store any licenses owners issued to others to use their intellectual property.

This database will be very useful for intellectual property lawyers, businesses, inventors, and creators by allowing them to easily view already-existing intellectual property data, including who owns the intellectual property and to whom it is licensed out to.

There do exist other websites that offer similar uses. For instance, one can search copyright data using the Library of Congress’s [WebVoyage](https://cocatalog.loc.gov/cgi-bin/Pwebrecon.cgi?DB=local&PAGE=First) search tool; search patent information using the [USPTO’s patent search tool](https://www.uspto.gov/patents-application-process/search-patents#heading-1); and one can search trademark information using the [USPTO’s Trademark Electronic Search System (TESS)](http://tmsearch.uspto.gov/bin/gate.exe?f=tess&state=4809:jaayyi.1.1). Also, both trademarks and patents can be searched on [assignments.uspto.gov](https://assignment.uspto.gov). Often, licensing agreements are not published for everyone to see. With our application we hope to encourage licensors and licensees to make their agreements public.

Furthermore, our application will also provide a special and easy method of storing copyright information on YouTube videos. This would likely involve some form of web-scraping or using YouTube APIs to retrieve information from [youtube.com](http://www.youtube.com/).

The data about the intellectual properties will be obtained from these online sources. Trademark and patent data will be sample data obtained from the USPTO. Copyright information will be obtained from WebVoyage. YouTube video data will be obtained from [youtube.com](http://www.youtube.com/). However, data regarding license types and licensees will be made up.

Basic Functions:

1. Insert - Inserting Intellectual Property entity requires it to be related to an Owner   
    entity.  
    Inserting Owner entity is fine any time unless it has same key as another   
    Owner entity.  
    Inserting Licensee entity requires it to be related to an IP entity.
2. Search - Ability to search for:  
    Owners by name  
    Intellectual Property by title  
    publication/filing date  
    type (patent, trademark, copyright)  
    Licensees by name
3. Queries -
   1. Join - Use an Equi-Join to join the Owner table with the Owns table to create a table of all the IPs owned by each Owner
   2. Aggregate Query - Use COUNT function to return the total number of:  
       Owners  
       Licensees  
       Intellectual Properties (and by type of intellectual property)  
       Intellectual Properties (of a certain type) owned by a certain Owner  
       Intellectual Properties licensed out to Licensees  
       Agreements between Owners and Licensees (and for each Owner   
       or Licensee)
4. Update - Alter:  
    Owner name  
    Licensee name  
    Re-assignment of an IP from one Owner to another Owner
5. Delete -   
    Licensee  
    Owner (triggers CASCADE delete of owned IPs)  
    Intellectual Properties

Advanced Function(s);

1. YouTube Data - Web-scrapes YouTube or uses YouTube APIs to retrieve data   
    from YouTube
2. Recommendation - If user is viewing data of one particular IP, recommend other   
    IPs:  
    From same Owner (and of same type)  
    That are of (same type and) similar names

Assumptions:  
 To have an IP licensed out to a licensee, Owner must own that IP.  
 Only 1 Owner per IP.  
 Attributes such as License Agreement and Abstract contain filename, not   
 the actual contents of License Agreement and Abstract.