Capstone Project Proposal

I. Goals
   A. Find different outdoor recreation activities throughout the US.
      1. View locations on a map
   B. Find different events or tours related to outdoor recreation
   C. Plan a trip, based around chosen activities.
      1. Identify where you can stay
         a) Camping
         b) Lodging
         c) Etc
      2. Identify what permits might be needed
      3. Identify what reservations might be needed
      4. Link to resources related to activities/lodging/etc
   D. Save trip plans
      1. Simple daily itenery
      2. Checklist - ie permits have been applied for, lodging reservations have been made
      3. Area to take notes/make comments
      4. Rate experiences?
II. Users
   A. Outdoor enthusiasts with minimal to moderate knowledge about certain outdoor activities who need a place to start exploring
   B. Families planning vacations
   C. Those more interested in lodging/camping vs. backcountry adventuring
III. Data
   A. Source
      1. Recreation.gov API
      2. https://ridb.recreation.gov/docs
   B. Activities
   C. Recreation Areas
      1. Include links
      2. Permit requirements
         a) Permitentrances by facilityID
         b) Links to permit sit -
            (1) Links by facility ID
   D. Facilities
      1. Campsites
      2. Hotels
      3. Reservations
   E. Data for each of the above
      1. Addresses
      2. Links
      3. Media, ie pics/videos

IV. General Approach
- A. Schema
  1. Users
     - a) ID
     - b) First name
     - c) Last name
     - d) Email
     - e) Username
     - f) Password
  2. Activities
     - a) ID - pk assigned based on API ID
     - b) Name
  3. Recreation Area
     - a) ID - pk assigned based on API ID
     - b) Name
     - c) Address
     - d) Geolocation
  4. To be continued
- B. API issues
  1. There could be missing information
  2. Seems to be a need to do lots of cross referencing
     - a) This can be mitigated by storing entity IDs
- C. Sensitive Info
  1. User information
- D. Functionality
  1. Searching
  2. Viewing on a map
  3. Storing trip information
  4. Adding notes
  5. Linking to external sites to make reservations or access more information about particular facilities
- E. Flow
  1. Home Page
     - a) Can view/search by rec areas, facilities, activities
       - (1) Maybe provide specific suggestions?
     - b) Link to create user profile
     - c) Link to create a new trip on a form that will require login
       - (1) Name trip
       - (2) Dates of trip
       - (3) Link to add locations
       - (4) Link to add activities
       - (5) Link to facilities
       - (6) Link to add lodging/camping
     - d) Link to trips page

       (1) List of trips that are linked to detailed trip page
          (a) Ability to add additional information
          (b) Making notes about the trip
          (c) Create a checklist
          (d) Ability to invite others via email to the trip?
          (e) Links to specifics allow notes to be added

e) Link to perform a more detailed search

f) Each search result links to a detailed information page
     (1) Link to add to a trip
     (2) Links to external resources

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