REST: URI / Identifier Designing Rules

Goals:
- API should be able to provide service to anything, anytime, anywhere.
- Authentication and Authorization
- Consistency
- Standardization and reusability

Generic URI sequence: `scheme:[//authority]path[?query][#fragment]`
- \# - fragment, we don't need to worry

Reserved Characters: Colon (:), Forward Slash (/), Question Mark (?), Hashtag (#), Square Brackets ([]), At Sign (@)

Rules:

Rule 1: Use of "/" separator is to represent hierarchical relationship.
Rule 2: Trailing forward slash (/) shouldn't be used.
Rule 3: use – to increase readability and use Underscore as least as possible
Rule 4: Use Lowercase instead of Upper case.
Rule 5: Do not include file extensions in URI

Resource Archetypes: Document, Collection, Store and Controller.
Rules for Naming convention

Rule #	Resource Archetypes	Representation word	Example
6	Document	Singular Noun	user
7	Collection	Plural Noun or Phrase	users
8	Store	Plural Noun or Phrase	videos, images
9	Controller	verb or verb phrase	calculateage, send

Rule 10: Variable/Dynamic segments of URI should use identity-based values
Rule 11: Do not use CRUD method/function name in URI

Use of query:
1. To filter collection or stores
   Ex: http://www.jracademy.com/users?firstname=john
2. Pagination Purpose:
   Ex: http://www.jracademy.com/users?startwith=11&pagesize=10
3. To add extra functionality