URL Shortener

The objective of this assignment is to create tiny url from large absolute url.

The project allows to create 62^{15} possible combination of tiny url in which length of unique key is configurable (Default 15).

Approach Document

Date: 30-09-2018

Version: 1.0

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Approach Document URL Shortener:

To-Be Process:

Prelude to the Process:

1. Application is used to generate tiny and maintain the track of tiny url.
2. User will be allowed to maintain expiry of url and delete url if needed further in the system(soft delete).

Process Start:

1. User has to provide absolute url with expiry and description to generate tiny url.
2. 15 Digit (configurable) unique key will be generated based on alphanumeric value and special character. Which allowed 62^{15} unique combination.
3. Unique Key contains (a-z, A-Z and 0-9) characters.
4. Each time unique key will be generated by system for example :
   http://localhost:<<port>>/ab124c3DE3d25gj
5. When all unique key utilized then system will append on more character inside
6. User will be allowed to delete the url which are not needed further.
7. User will be allowed to fetch all active tiny url at any point in time.

Api Details

#	Api	Method Type	Request / Response	Description
1	http://localhost:<<port>>/viewTinyUrl	POST	Request: {} Response: {"data":{"tinyUrlId":1,"tinyUrlList":[{"tinyUrl":"http://localhost:<<port>>//ab3cDE1t6245f6d","description":"Description about tiny url","expiry":"15-45-2018"},{"tinyUrlId":2,"tinyUrl":"http://localhost:<<port>>//fg6g98EDj765df5t","description":"Description about tiny url","expiry":"01-10-2018"}]},"status":"success","message":"Tiny Url fetched successfully"}	It will fetch active tiny url from system

2	http://localhost:<<port>>/generateTinyUrl	POST	Request: {"data":{"absoluteUrl":"https://www.google.com/search?q=google&rlz=1C1CHBF_enIN772IN772&oq=google&aqs=chrome..69i57j69i60l2j0l3.730j0j7&sourceid=chrome&ie=UTF-8","expiry":"05-11-2018"}} Response: {"data":{"tinyUrl":"http://localhost:<<port>>/aabbd88576tfd4d"},"status":"success","message":"Tiny Url Created successfully!!!"}	It will generate tiny url for inputted absolute url
3	http://localhost:<<port>>/editTinyUrl	POST	Request: {"data":{"editTinyUrl":{"tinyUrlId":"1","expiry":"06-12-2018","description":""}} Response: {"status":"success","message":"Tiny Url updated successfully!!!"}	It is used to update expiry and/or description of tiny url
4	http://localhost:<<port>>/deleteTinyUrl	POST	Request: {"data":{"tinyUrlId":[1,2]}} Response: {"status":"success","message":"Tiny Url deleted successfully!!!"}	It is used to delete one or more tiny url
5	http://localhost:<<port>>/<<tinyUrlKey>>	GET		It will be rendered to respective absolute url
6	http://localhost:<<port>>/config	POST	Request: {"data":{"uniqueKeyLength":20}} Response: {"status":"success","message":"Unique Key length updated successfully!!!"}	It will allow user to increase the length of unique key

Document Revision History

#	Action	By	Date	Version
1	Document Created	Manish Waghela	30-Sep-2018	1.0