#### Introduction



- DOM Cracker is a node.js framework which can be used for accessing the DOM of webpages.
- It act as a server.
- We may use it for providing customer various services.
- It act as a gateway between web server and client.
- It fetches the data( as DOM ) from server, injects some scripts and send it to the customer/client.

#### **DOM Cracker**



#### It can be used for:-

- Content Filtering
- Proxy Chaining
- Stopping phishing activities
- Test Automation of web applications
- Web content analysis like task

and many other applications where we need to control the DOM.

## Can make simple websites more responsive



- By making some rules like :-
  - Header is at the top, generally first direct child of body, and having <div> tag.
  - Generally, second direct child of body is navigation bar having 
     or 
    tag.
  - Last direct child of body is footer having <div> tag.
  - Other all are body contents.

By making these rules we may cover most of the old websites and may make them more responsive

( or )

may remove most of the unwanted contents like <script>, advertisements etc. for speed browsing on slow network

( or )

may monitor real-time speed of client and may provide dynamic web content.

# Say Good Bye to hackers .... No more Phishing



- Most of the hackers make most visiting sites as their target .
- A solution and an approach
  - We may use this framework to get dom access and hence content .
  - We may extract out some most frequent texts and phrases ,
  - Use google search api for getting some top results ,
  - Match their contents with dom object contents ,
  - If same contents found then add it to phishing site list in database ,
  - Otherwise add to safe site list.

This is a learn from user visit approach to get most of the phishing sites on the web.

# A way to product automation testing



- We may inject various event listeners like click, change, dblclick, etc. to track developer activities and record it in a script format.
- After any up gradation to the product, he may play previous scripts for different components of product to test it for any break/error.

## **Content filtering**



- Today most of the services for content filtering is url based.
- This is done by some DNS like openDNS.
- But may be whole contents are not unsafe/unwanted for client.
- We may make certain rules :-
  - Like list of unsafe words/phrases.
  - Advertisement <div> (or) <script>
  - may process images <img> to get unwanted one
     And may remove it from the DOM before sending to the client.