“ HOIST ”

Enrol. No.: 10103487

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Name of Supervisor: Prof. Sanjay Goel

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Submitted in fulfillment of the Degree of Bachelor of Technology

In

Computer Science Engineering

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING &
INFORMATION TECHNOLOGY

JAYPEE INSTITUTE OF INFORMATION TECHNOLOGY, NOIDA

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DECLARATION

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgment has been made in the text.

Place: Noida Signature:

Date: 31st May 2014 Name: Harsh Bhatia

Enrollment No: 10103487

CERTIFICATE

This is to certify that the work titled “**PHOTOSHOP TO WEB CONVERTER PLUGIN**” submitted by “**HARSH BHATIA**” in partial fulfillment for the award of degree of B-TECH in Computer Science Engineering of Jaypee Institute of Information Technology University, Noida has been carried out under my supervision. This work has not been submitted partially or wholly to any other University or Institute for the award of this or any other degree or diploma.

Signature of Supervisor

Name of Supervisor	Prof. Sanjay Goel
Designation	Head Of Department (Computer Science)
Date	14th December 2013

ACKNOWLEDGEMENT

The success and final outcome of this project required a lot if guidance and assistance form many people and we are extremely fortunate to have got this all along the completion of this project work. Whatever we have done is only due to such guidance and support and we would not forget to thank them.

We owe our profound gratitude and thank our project supervisor, Prof. Sanjay Goel, for giving us the opportunity to do the project work on this topic and providing us all the support and guidance which made us complete the project work on time. We are extremely grateful to him for providing such a nice support and guidance despite of his busy schedule.

We are thankful to fortunate enough to get constant encouragement, support and guidance from all the teaching staffs of the Department of Computer Science of JIIT, which helped us in successfully completing our project work.

Signature of the Student

Name of Student	Harsh Bhatia
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SUMMARY

HOIST is a Photoshop Script plugin to convert a Photoshop Document (PSD) into a html and CSS code used for standard static web page.

A Photoshop Script is an approach to automate Photoshop using its JavaScript object model. Photoshop Application Programming Index (API) allows user to use Photoshop object model to automate filters, functionalities and effects or convert a document into various format. HOIST, once called, extracts all the information from the PSD file and converts the possible effect into its HTML and CSS code and lately combine it all to complete a static webpage design.

By HOIST our goal is to remove the gap of functionalities between a graphic template designer and a web developer for better web-design.

Signature of Student	Signature of Supervisor
Name: Harsh Bhatia	Name: Prof. Sanjay Goel
Date: December 14th, 2013	Date: December 14th, 2013

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LIST OF SYMBOLS AND ACRONYMS

ACRONYMS	**EXPANSION**
PSD	PHOTOSHOP DOCUMENT
API	APPLICATION PROGRAAMING INDEX
CS	COMPLETE SUITE
CSS	CASCADING STTLE SHEETS
HTML	HYPER TEXT MARK UP LANGUAGE

INTRODUCTION

1. GENERAL INSTRUCTION

"HOIST" is a Photoshop Script plugin to convert a Photoshop Document (PSD) into a html and CSS code used for standard static web page.

A Photoshop Script is an approach to automate Photoshop using its JavaScript object model. Photoshop Application Programming Index (API) allows user to use Photoshop object model to automate filters, functionalities and effects or convert a document into various format. "HOIST", once called, extracts all the information from the PSD file and converts the possible effect into its HTML and CSS code and lately combine it all to complete a static webpage design.

A script is a series of commands that tells Photoshop to perform a set of specified actions, such as applying different filters to selections in an open document. These actions can be simple and affect only a single object, or they can be complex and affect many objects in a Photoshop document. The actions can call Photoshop alone or invoke other applications.

Scripts automate repetitive tasks and are often used as a creative tool to streamline tasks that might be too time consuming to do manually. For example, you could write a script to generate a number of localized versions of a particular image or to gather information about the various color profiles used by a collection of images.

WHY SCRIPT?

Scripting allows you to extend those benefits by allowing you to add functionality that is not available for Photoshop Actions. For example, you can do the following with scripts and not with actions:

- ➤ You can add conditional logic, so that the script automatically makes "decisions" based on the current situation. For example, you could write a script that decides which color border to add depending on the size of the selected area in an image: "If the selected area is smaller than 2 x 4 inches, add a green border; otherwise add a red border."
- ➤ A single script can perform actions that involve multiple applications. For example, depending on the scripting language you are using, you could target both Photoshop and another Adobe Creative Suite 6 Application, such as Adobe Illustrator® CS6, in the same script.
- ➤ You can open, save, and rename files using scripts.
- ➤ You can copy scripts from one computer to another. If you were using an Action and then switched computers, you'd have to recreate the Action.

- Scripts provide more versatility for automatically opening files. When opening a file in an action, you must hard code the file location. In a script, you can use variables for file paths.

A document object model (DOM) is an application programming interface (API), which allows you to programmatically access various components of a document (as defined for that application) through a scripting language. For additional information about Adobe object models and the scripting languages that support them, see Introduction to Scripting.

The Photoshop DOM consists of a hierarchical representation of the Photoshop application, the documents used in it, and the components of the documents. The DOM allows you to programmatically access and manipulate the document and its components. For example, through the DOM, you can create a new document, add a layer to an existing document, or change the background color of a layer. Most of the functionality available through the Photoshop user interface is available through the DOM.

“HOIST” is an open-source, which let users to use it for free and modify it as per their own requirement or designing pattern, because we believe in customization and betterment via any means.

2. PROBLEM STATEMENT

Graphic Designers generally complains about the proposed markup by them and the final design developed by the developer differ by various reason as various filters / effects available in PS are not available in web or the ratio of document to web page attributes if different. “HOIST” gives PSD designers freedom to design in the web friendly environment and convert it into responsive web page design while filling the gap between a developer and designer.

3. RELEVANT, CURRENT AND OPEN PROBLEMS

Currently available soft wares for converting PSD to HTML or CSS contain either of one format or strip down total document as image and attach in web page in an inappropriate way. Old method doesn’t satisfy the responsive behavior various html tags and complete CSS effects. An old script doesn’t create a single page markup for webpage or relate different html tags with latest web features like header or footer.

Current problem is the developer not getting exact conversion of the effect developed by designers. All effects like shadow, border and similar effects are not being converted into all effects for web. HTML has not been converted into this format ever before, the conversion by photoshop automatically takes a snapshots and divide into several parts and makes only a image tag of html and doesn’t take all css effect. This effect is all about arranging image into a html page.

4. OVERVIEW OF PROPOSED SOLUTION, APPROACH AND BENEFITS

"HOIST" will provide HTML code with CSS for particular Document in Photoshop, and download them in the same folder as PSD file. "HOIST" will be beneficial in the following ways:

1. Converting PSD into CSS with absolute positioning and size ratio to adjust the responsive behavior.
2. Creating respective HTML files for better compatibility
3. Using classes fir CSS, leaving ids for JavaScript functioning.
4. Optimization of CSS for minimal code.
5. Creating single page webpage/ web application was never been simpler.
6. Web project created is just good to go and can be hosted on server.

PROPOSED SOLUTION:

"HOIST" is based on Adobe Photoshop API which unable developer to extract elements from psd files to automate tasks or process. I took the concept and created an algorithm to convert all the layers, layer-sets and effect to particular compatible to web. It's a 3step process clearly described later in activity diagram but the steps are following:

1. Extract PSD components
2. Convert into CSS and HTML files
3. Create HTML AND CSS files.
4. Download complete project in same folder as the psd file.

LITERATURE SURVEY

2.1.1 SUMMARY OF TOOLS STUDIED

1. Photoshop Scripting API

Summary: Photoshop scripting API is Photoshop object model representation and function declaration guide. Completely written and very badly designed guide for API makes it very difficult to read and extract information.

2. Photoshop Scripting Reference

Summary: Photoshop scripting reference is guide for making plugin attached on the top layer of Photoshop to permit access to the document and its content.
designed in Apple script for Mac, Visual Basic for Windows and JavaScript for cross platform.
Link: http://www.adobe.com/devnet/photoshop/scripting.html

3. ART in Information age by EA Shanken (paper)

Summary: This paper Suggest the method and ways evolved in the field of art due to information and technology. A new trend of Digital world has been form and a domain of digital art has been developing. Effect of non-paper art and effect of social media in its expansion has been a boom to art.

Link address: -
https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CCoQFjAA&url=http%3A%2F%2Finfodate.nctu.edu.tw%2Fteaching%2Fpa..%2Flessons%2Fweek14%2F10art%2520in%2520the%2520information%2520age.pdf&ei=-0SBUtq-LIiSrgeEl4CoBQ&usg=AFQjCNHDsmT3x-4EFE5j23t3NpoGVj29CA&sig2=O5aStYIMCXHnTVtXGlCUkA&bvm=bv.56146854,d.bmk

4. Information technology and art concepts by SU Ahmed

Summary: Similar to previous page this paper also explain the importance of IT in Art and its expansion

Link address: -

https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&cad=rja&ved=0CEkQFjAD&url=http%3A%2F%2Fciteseerx.ist.psu.edu%2Fviewdoc%2Fdownload%3Fdoi%3D10.1.1.159.3379%26rep%3Drep1%26type%3Dpdf&ei=-0SBUtq-LIiSrgeEl4CoBQ&usg=AFQjCNEYpyjkLhnNKISBvnw-eS21_7kMcA&sig2=fsqM4PRgA1nqoe6cax67Ow&bvm=bv.56146854,d.bmk\

5. Wikipedia article on Digital Art

Summary: Digital art is a general term for a range of artistic works and practices that use digital technology as an essential part of the creative and/or presentation process. Since the 1970s, various names have been used t o describe the process including computer art and multimedia art, and digital art is itself placed under the larger umbrella term new media art

Web link: http://en.wikipedia.org/wiki/Digital_art

2.1.2 INTEGRATED SUMMARY OF LITERATURE STUDIED

The basic aim of the tools and literary work was to gain the knowledge of importance of Gap of execution between a designer and a web developer and need of a tool to remove it. The Photoshop API and reference makes it much easier to understand the working of Photoshop and modify or automate its functionality for better productivity.

While the research papers and all the literature above gives importance of digital media for better content on web and bringing the artwork to digital world. Conversion into CSS required a deep knowledge of CSS and HTML and was supported through various known and unknown sources like stack Overflow question answers, W3schools and other web tutorial.

2.1.3 COMPARISION WITH EXISTING APPROACHES

“HOIST”	**CSS3PS**	**CSSHAT**
Complete HTML and CSS code	Only CSS code	Only CSS
Complete document conversion	Complete document conversion	Only selected layers are converted into css
Responsive behavior with code in html and CSS mutually connected file	CSS code to be carried out at the clipboard	CSS code copied to clipboard
CSS code generated with class and connected with html	No class declaration	Class declaration
Code optimization	No optimization	No
Open Source	Costly with one free trial	No free trial and costly

3. ANALYSIS, DESIGN AND MODELLING

3.1 REQUIREMENTS SPECIFICATIONS

v **Hardware Requirements:**

§ Personal Computer/Laptop.

§ Internet connection

v **Software Requirements:**

§ Apple IOS operating system

§ ADOBE PHOTOSHOP CS5+

3.2 FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS

1_**Functional Requirements:**

- Effects Created by user must be available in CSS for conversion into CSS
- Classes are defined as the name of layers so it should not contain special character or individual numbers.
- Layer effects must not contain element non-described or irrelevant to the format of web.

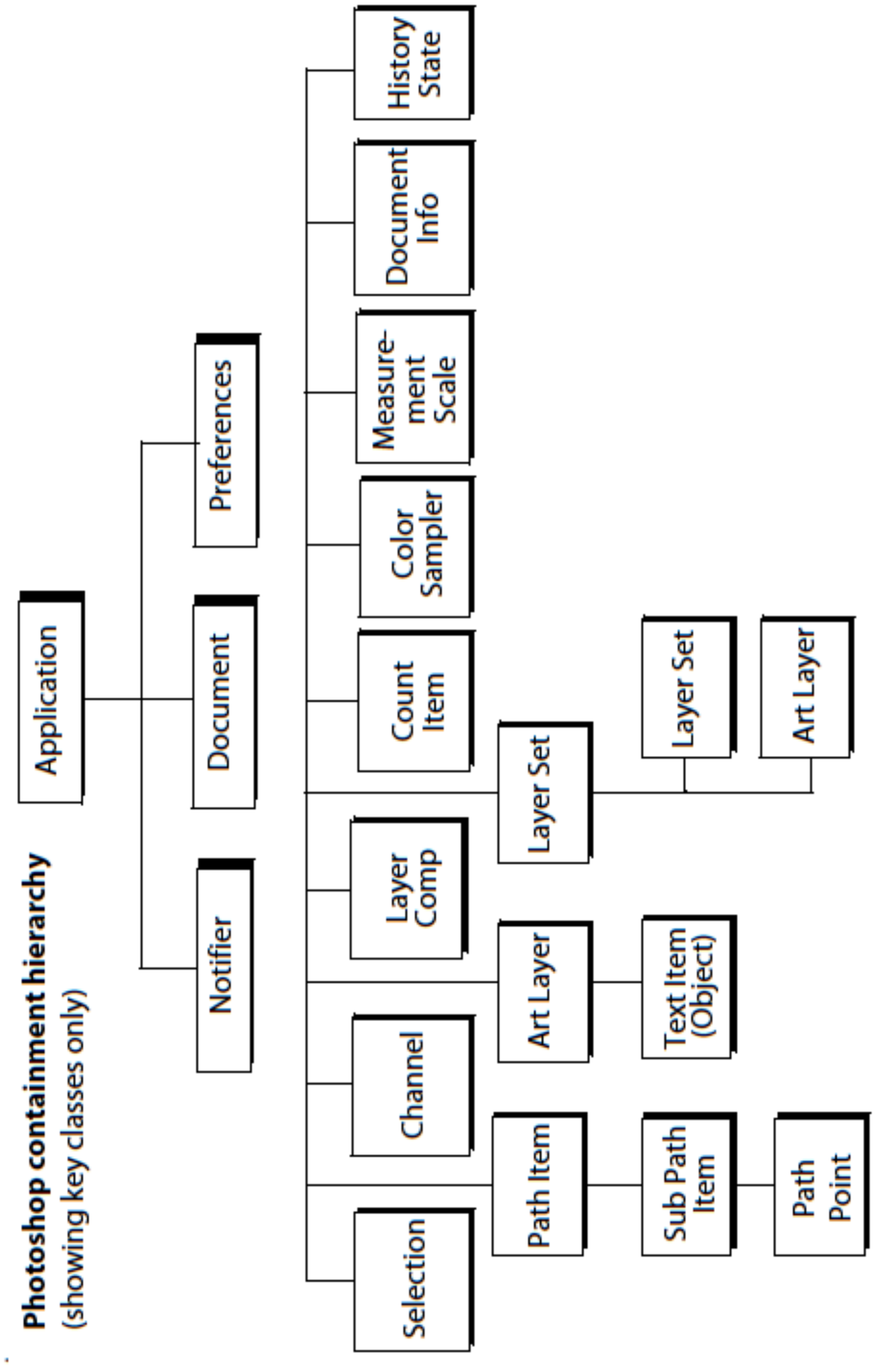
2 _**Non-Functional Requirements:**

- Error Handling: Product handles expected and non-expected errors such as irrelevant and inappropriate nomenclature by providing alternatives for them.

- Performance Requirements:
  o Response Time: The processing of the results i.e. fetching and converting should be done very fast.
  o Workload: single File /document is converted once with limited processing speed.
  o Scalability: It is a software based service so can be used at windows/ iOS platform with standard supporting latest Adobe Photoshop CS.

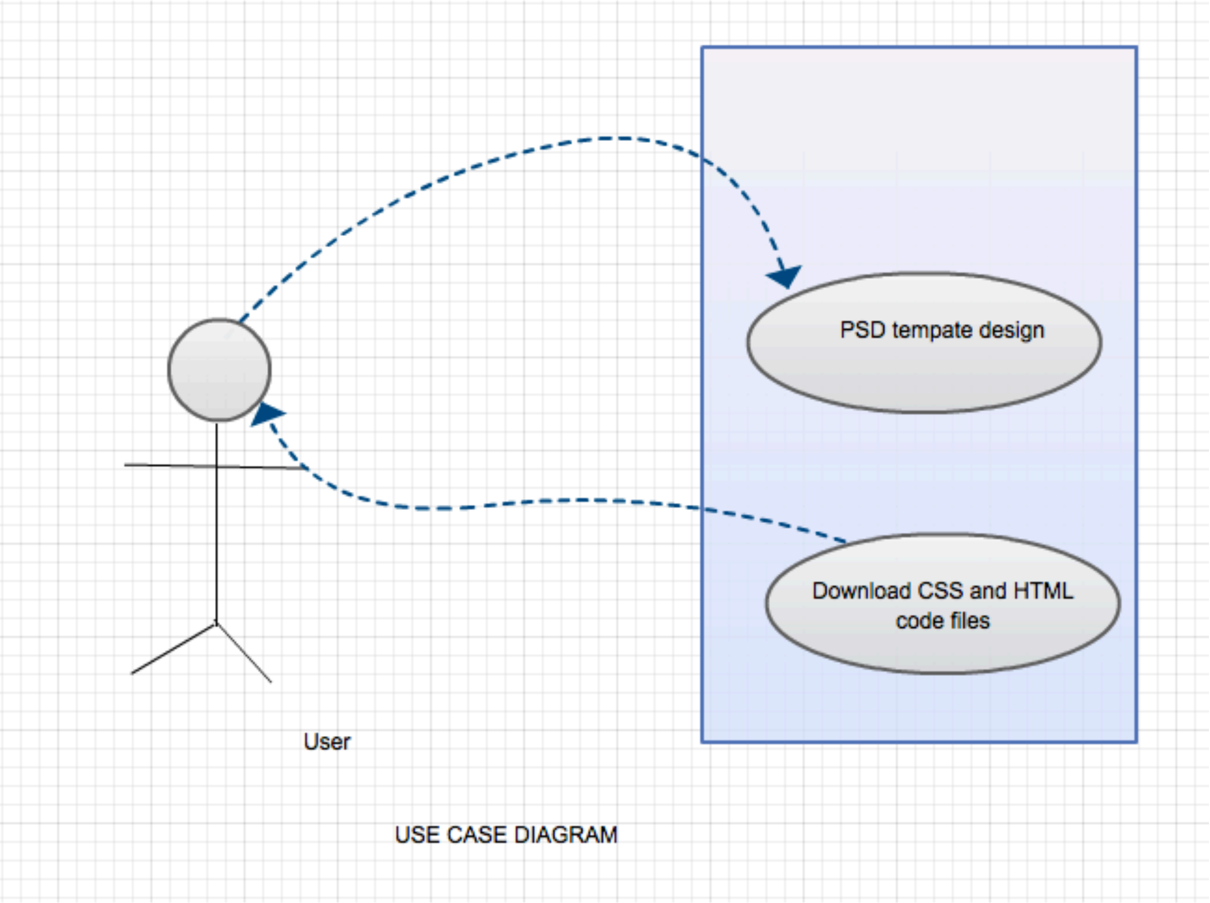
- Better hardware for fast processing.

3.3 OVERALL ARCHITECTURE WITH COMPONENT DESCRIPTION AND DEPENDENCY DETAILS

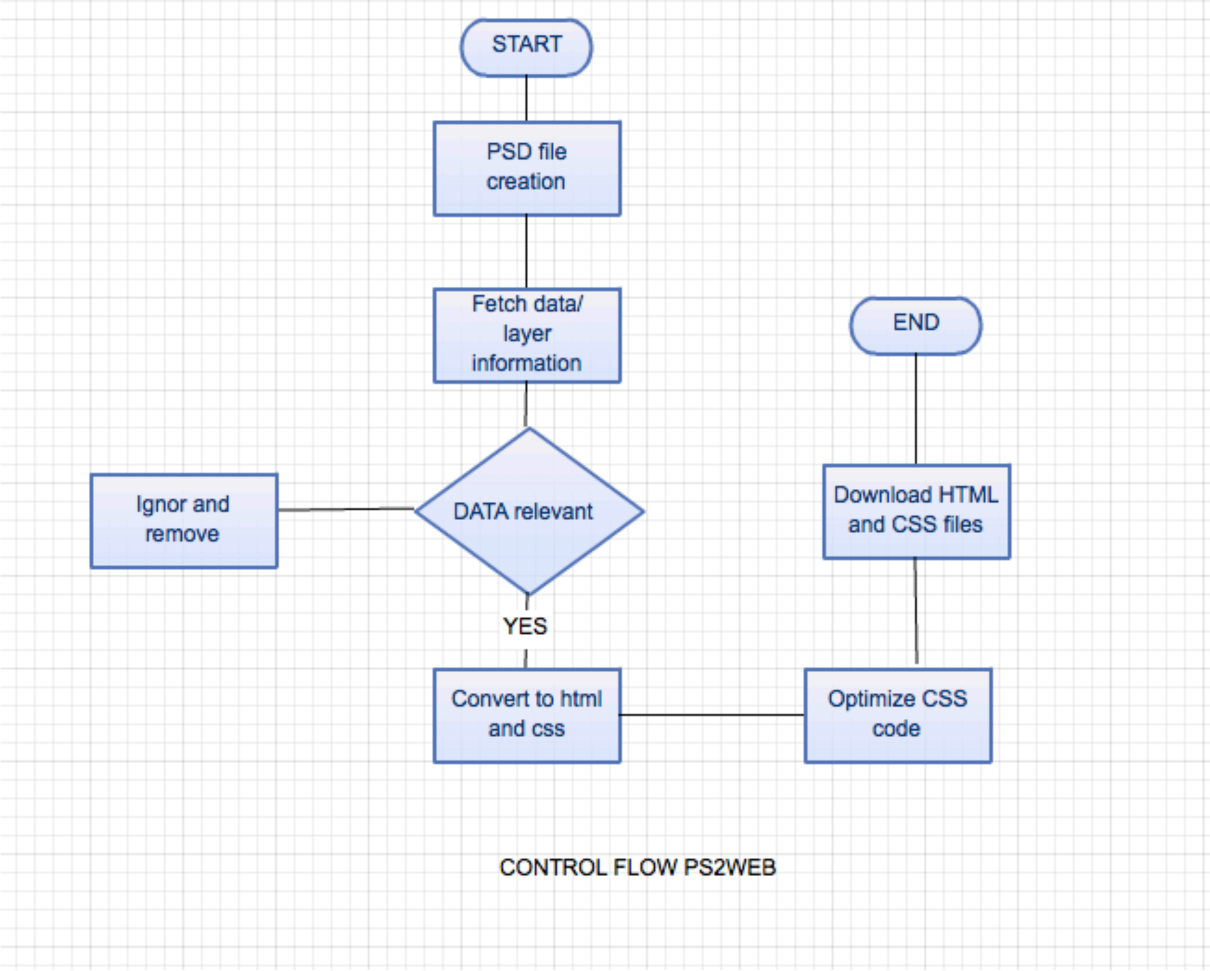


3.4 DESIGN DOCUMENTATION

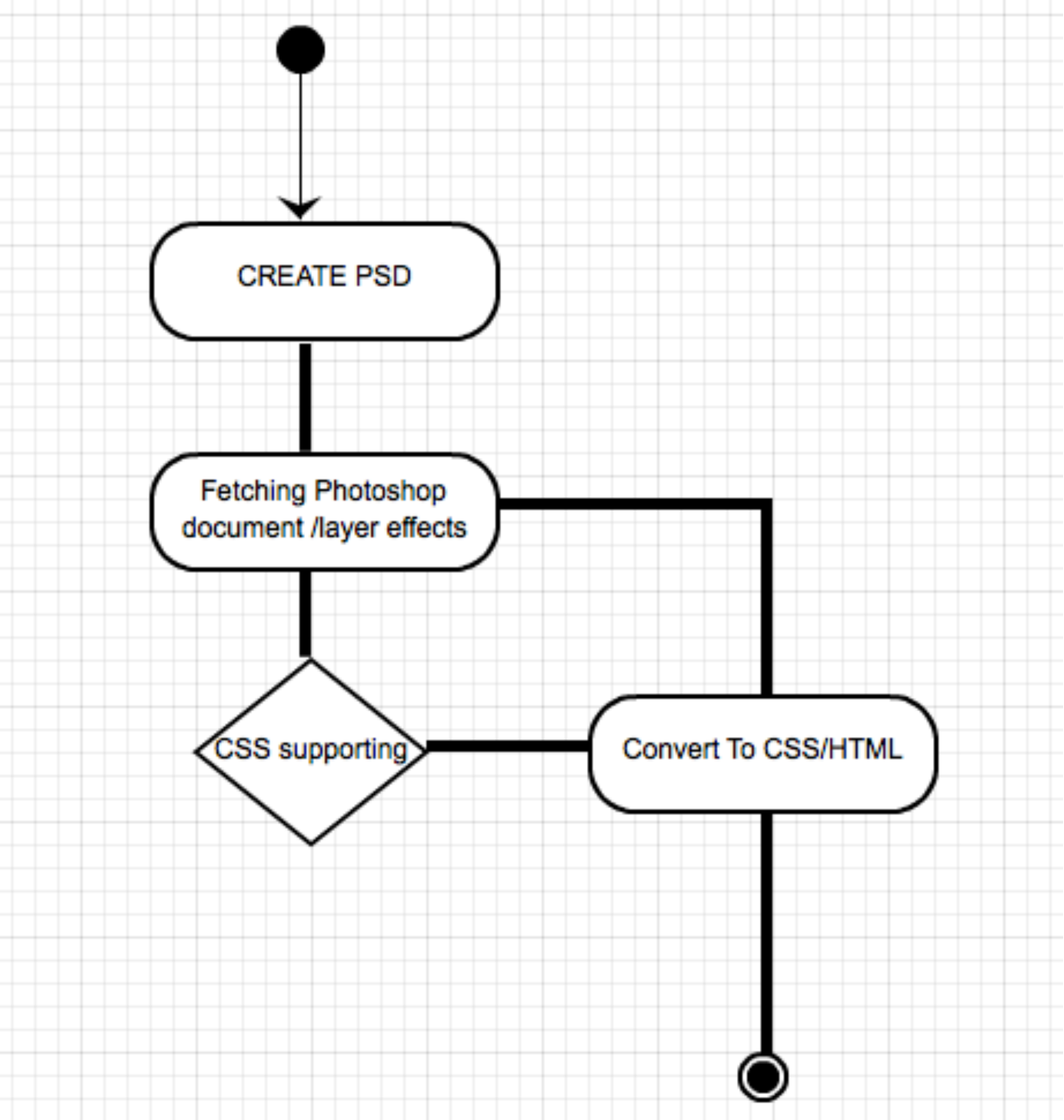
3.4.1 USE CASE DIAGRAM



3.4.2 CONTROL FLOW DIAGRAM



3.4.3 ACTIVITY DIAGRAMS



ACTIVITY DIAGRAM PS2WEB

4.IMPLEMENTATION AND TESTING

4.1 IMPLEMENTATION DETAILS AND ISSUES

1. Fetching:

    1. Fetching Application layer information
    2. Fetching document information
    3. Fetching layer types and respective effects

2. Converting to HTML:

TAG	COVERTED to
Text with paragraph format	<p>
Image	<img>
Rectangle	<div>
Solidfill	<div>
Document name	<title>
Layername	Class name
Text layer with single format	<h1>-<h6>

Total list of supported HTML Elements are:

• !--	• !DOCTYPE	• body
• html	• img	• style
• h1 - h6	• div	• head
• center	• script	• button
• embed	• figcaption	• figure
• input	• nav	• video
• textarea	• span	• section

3. Converting to CSS

1. Converting following information into css syntax

- Font-size
- Font family
- Position
- Width of div
- Height of div
- Orientation
- Border
- Line height
- Font color
- Opacity

The following css properites are supported:

• align-content	• align-items	• align-self
• z-index	• display	• width
• visibility	• opacity	• margin
• margin-bottom	• margin-left	• margin-right
• margin-top	• font	• @font-face
• font-family	• font-size	• font-size-adjust
• font-stretch	• font-style	• font-variant
• font-weight	• bottom	• float
• height	• left	• letter-spacing
• line-height	• overflow	• overflow-x
• overflow-y	• padding	• padding-bottom
• padding-left	• padding-right	• padding-top
• top	• text-shadow	• text-decoration
• position	• word-break	• word-spacing
• word-wrap	• text-align	• text-align-last
• text-decoration-color	• text-decoration-line	• text-indent
• text-justify	• text-overflow	• box-shadow
• color	•	•

ISSUES:

1. font-size and font family function do not respond for multiple size in same paragraph or multiple font in same text filed.
2. Fonts on the web will only respond or you have to add it on your folder with @import font methods in css file.
3. Shadow function only available with length, color and few parameters due to constrain in the functionality of web.
4. Similar layers name/ numerical naming causes effect to non-functional in css.
5. Css static function only works. No animation or transform functionality and delay are stated.
6. Only layers in the big container i.e. in the layerset works no independent layer works.
7. Currently it works only on MAC OS. I am planning to release for windows soon.

The following the properties and HTML tags that are not yet supported by HOIST:

animation	backface-visibility	background
background-attachment	background-clip	background-color
background-image	background-origin	background-position
background-repeat	background-size	border
box-sizing	caption-side	clear
clip	column	content
counter	empty-cells	flex
hanging-punctuation	icon	justify-content
@keyframes	list	max-height
max-width	min-height	min-width
order	outline	page-break-after
page-break-before	page-break-inside	perspective
quotes	resize	tab-size
table-layout	transform	transition
unicode-bidi	vertical-align	white-space

HTML TAGS.

a	abbr	acronym	address
applet	area	article	aside
audio	b	base	basefont
bdi	bdo	big	blockquote
br	canvas	caption	cite
code	col	colgroup	command
datalist	dd	del	details
dfn	dialog	dir	dl
dt	em	fieldset	font
footer	form	frame	frameset
header	hr	i	iframe
ins	kbd	keygen	label
legend	li	link	map
mark	menu	meta	meter
	noframes	noscript	object
ol	optgroup	option	output
p	param	pre	progress
q	rp	rt	ruby
s	samp	select	small
source	strike	strong	sub
summary	sup	table	tbody
td	tfoot	th	thead
time	title	tr	track
tt	u	ul	var
wbr			

ALGORITHMS:

- **Tag Extraction:**

  H1-H6 and p tag division from regular photoshop document depending upon the size of font and the type of layer.

- **Class Name Beautification**

  Class Name equal to the name of layer by converting it into suitable format as replacing space by hyphens and shortening more than 20 character long layer name into type and layer number combination.

- **File and Folder formation**

  Creating file and folder by Photoshop API of creating a File and extracting the location.

- **Conversion of Ps Shadow to CSS shadow**

  Converting PS shadow to css via rules described as follows:

```
$angle: (180 - $angle) * pi() / 180; // convert to radians
$h-shadow: round(cos($angle) * $distance);
$v-shadow: round(sin($angle) * $distance);
$css-spread: $size * $spread/100;
$blur: ($size - $css-spread);
$inset: if($inner != false, 'inset', '');
```

- **Position relation and margin location**

  Converting all the documents into 1024 width and then positioning every element as absolute position and maintaining top and bottom.

- **Button object**

  Button tag by taking layer name as Button and converting the inner content into span and creating all effort as possible.

- **Css shapes extraction**

  Css shapes by taking the coordinates of the figures made by PSD file. And converting into specific objects.

4.1.1 PROPOSED SOLUTIONS

1. Keep same font family and size while designing in psd, do not rasterize the text box.
2. Keep nomenclature to be in context of class name i.e non numerical and space free.
3. Keep all layer in layerset.

4.2 Risk Analysis and Mitigation Plan

ID	Description	Area	Probability	Impact	Risk Selected	Contingency Plan
1	Fixed size document	Design	Good	Impact on final design to be responsive, scrolling or one page	Final output design would be	Assumption of fixed document size.
2	Similar layer names	Extraction	Max	On id assignment and division for CSS.		Assigning a number set t similar id or class definit
3	Unconvertible PS effect	Design	High	Overall css design would be different than proposed		Assuming the nearest pos css effect to particular ob

TESTING

TESTING PLAN

Sr. No.	Types of Test	Will test be performed?	Comments/Explanations	Software Component
1.	Requirement Testing	Yes	All appropriate API's are installed.	To be tested on OS.
2.	Unit Testing	Yes	Software units tested on multi platforms.	To be tested on the user side.
3.	Integration	Yes	Successful software integration on Windows and mac operating systems.	The client script tested on different devices.
4.	Performance	Yes	Server responds to any conversion in minimal time.	To be tested on the software side.
5.	Stress	Yes	Able to convert all tags	To be tested on Adobe PS.
6.	Compliance	Yes	In compliance with the existing competition needs.	Suite to be tested and compared with existing technologies.
7.	Security	No	-	-
8.	Load	No	Software allows multiple users to request at same time.	To be tested on user's threading component.
9.	Space	Yes	Results for all the layers on PS are processed.	On Photoshop.
10.	Interface	No	-	-

TEST TEAM DETAILS

This is an individual project so all the codes and tests and diagram are created and operated by me.

TEST ENVIRONMENT Software Items:

1) Operating systems used:

Mac operating system(iOS-lion10.8.1)

Hardware Items:

The only hardware is computer systems.

1. 2 GB or higher RAM
2. Graphic Card with 1GB internal memory
3. Processor 1.9 GHz or higher.

4.2.2 COMPONENT DECOMPOSITION &TYPE OF TESTING REQUIRED

Sr. No	Components (modules) that require Testing	Type of Testing Required	Technique for writing test cases
1.	Plugin inclusion API testing	Requirement Testing, Compliance	Black Box
2.	Application, Layer and Document effect fetching	Performance, Stress, Load and Space Testing	Black Box
3.	Conversion into css and HTML	Performance, Load, and Space Testing	Black Box
4.	Correctness of Results	Unit Testing, compliance	Black Box

Table 5:- Component Decomposition and Type of Testing Required

4.2.3 TEST CASES

1. Only Text layer in one document

Test Case ID	Input	Expected Output	Status
1.	Fetching text effect and function	Successful run	Pass
2.	Conversion and display	Successful run	Pass

2. Only Image in one Document.

Test Case ID	Input	Expected Output	Status
1.	Fetching image effect and function	Successful run	Pass
2.	Conversion and display	Successful run	Pass

3. Large file with simple combinations of text and image

Test Case ID	Input	Expected Output	Status
1.	Fetching text and image effect and function	Successful run	Pass
2.	Conversion and display	Successful run	Pass

4. Only rectangle/shape in file

Test Case ID	Input	Expected Output	Status
1.	Fetching div effect and function	Successful run	Pass
2.	Conversion and display	Successful run	Pass

5. Table for Irregular Inputs/Queries

Test Case ID	Input	Expected Output	Status
1.	Multiple text –size and font value	Fetching of font size and element	Fail
2.	Conversion into css and html	Conversion after fetching	Fail

Table:-Table for Correctness of Results

Test Case ID	Input	Expected Output	Status
1.	Multiple text –size and font value	Fetching of font size and element	1. case failed for multiple entries 2. Working well on single output
2.	Conversion into css and html	Conversion after fetching	Successfully converting single value function.

FINDINGS AND CONCLUSION

6.1 FINDINGS

- We can not convert all the Photoshop effect to web as Photoshop has a very rich designing library designed for itself. Web needs to improve further to get all the features into html and Css.
- We cannot add other js libraries to Photoshop to convert a new software or application.
- Photoshop has several layers type and that has to be converted into div or section tag of html and hence limiting the functionality.
- Apple script and Visual Basic cannot work on both operating system while js single file without any changes in function runs perfectly on both.
- Photoshop library is rich and can be converted for automated for better use in web using various plugins or scripts.

6.2 CONCLUSION

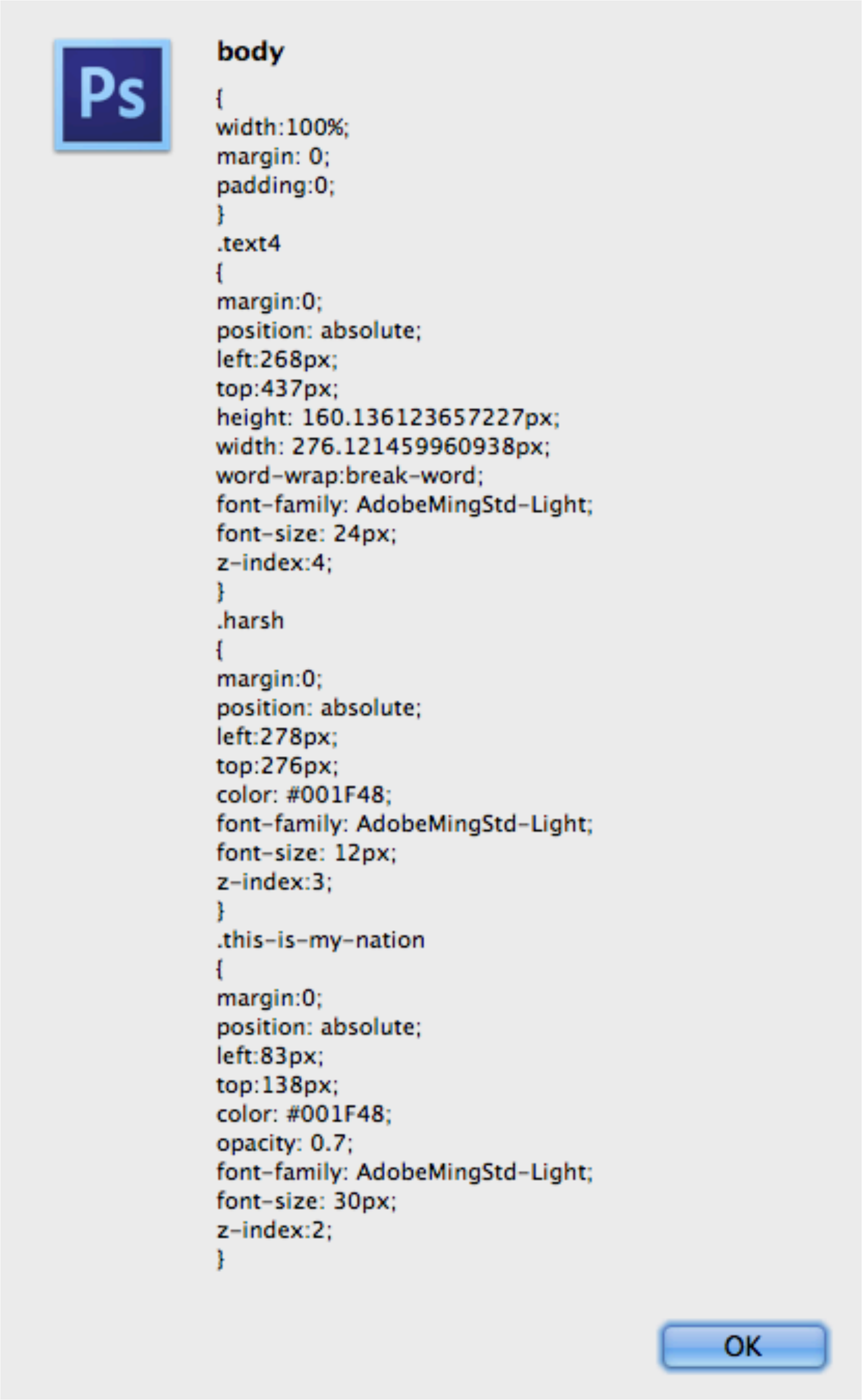
"HOIST" is an excellent script and can be used for removing the gap between a graphic designer and a developer. It can be used to increase productivity by minimizing the time to code and making developer friendly design. "HOIST" can be use to create single buttons or text format or shadow design and its css code can be used to add into existing code of a website. Pre-design conversion and possible effect into css and html of a PSD file, can be found out using this script.

FUTURE WORK

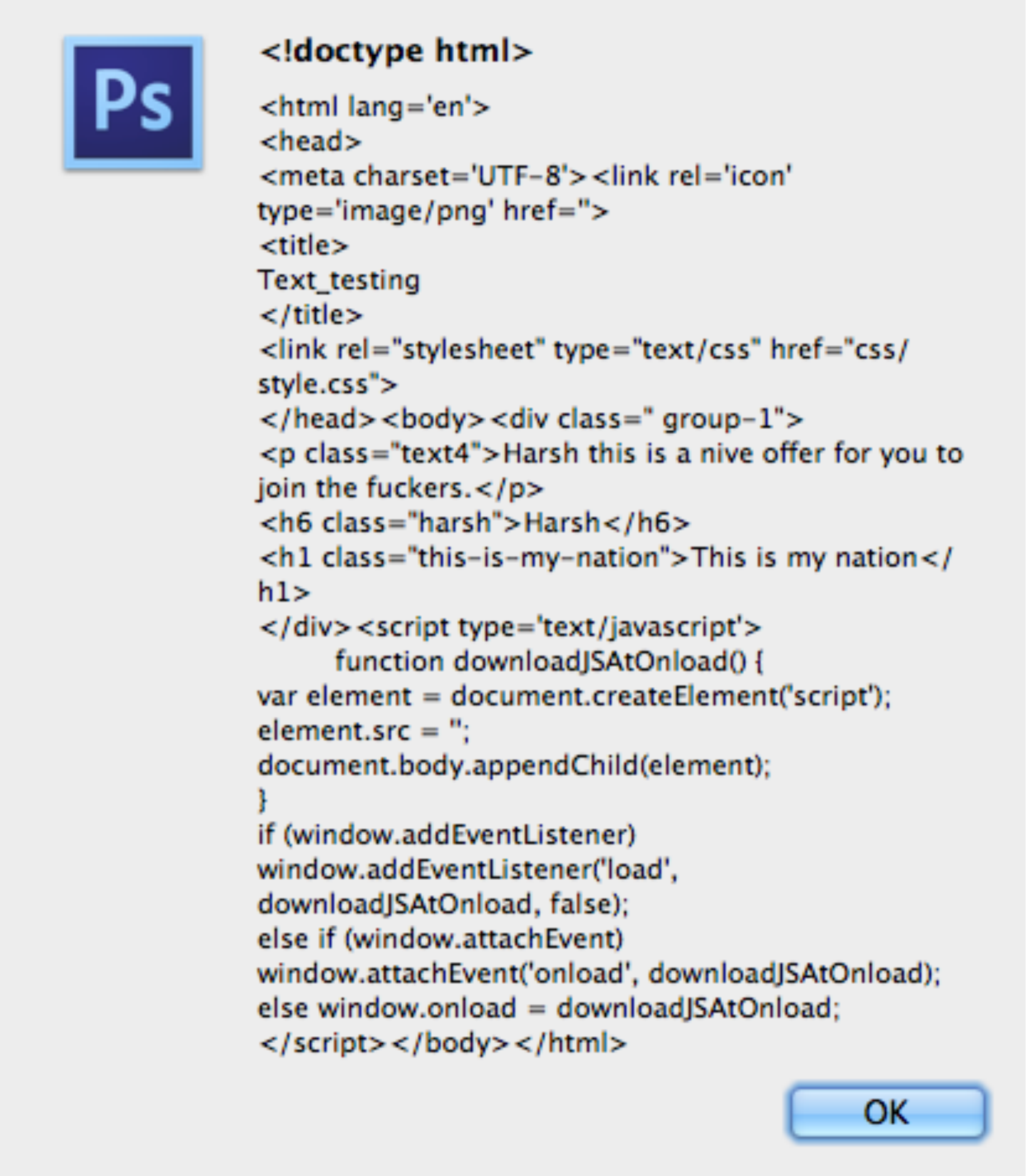
“THERE IS ALWAYS A ROOM FOR DEVELOPMENT” – unknown
As we believe in this quote, hoist script can be improved alot, being an open-source can help it succeed a lot in the field of ps scripting. Still there are few areas listed below where the code can be developed.

- Use of all HTML tags for writing code.
- Optimizing CSS and renaming layer with specific class name for less code
- Importing external libraries for special effect
- Use of all available CSS functionality to generate better static webpage.
- Responsive behavior for mobile and tablet preview.

SNAPSHOTS



```
body
{
width:100%;
margin: 0;
padding:0;
}
.text4
{
margin:0;
position: absolute;
left:268px;
top:437px;
height: 160.136123657227px;
width: 276.121459960938px;
word-wrap:break-word;
font-family: AdobeMingStd-Light;
font-size: 24px;
z-index:4;
}
.harsh
{
margin:0;
position: absolute;
left:278px;
top:276px;
color: #001F48;
font-family: AdobeMingStd-Light;
font-size: 12px;
z-index:3;
}
.this-is-my-nation
{
margin:0;
position: absolute;
left:83px;
top:138px;
color: #001F48;
opacity: 0.7;
font-family: AdobeMingStd-Light;
font-size: 30px;
z-index:2;
}
```



```
<!doctype html>
<html lang='en'>
<head>
<meta charset='UTF-8'><link rel='icon'
type='image/png' href=">
<title>
Text_testing
</title>
<link rel="stylesheet" type="text/css" href="css/
style.css">
</head><body><div class=" group-1">
<p class="text4">Harsh this is a nive offer for you to
join the fuckers.</p>
<h6 class="harsh">Harsh</h6>
<h1 class="this-is-my-nation">This is my nation</
h1>
</div><script type='text/javascript'>
        function downloadJSAtOnload() {
var element = document.createElement('script');
element.src = ";
document.body.appendChild(element);
}
if (window.addEventListener)
window.addEventListener('load',
downloadJSAtOnload, false);
else if (window.attachEvent)
window.attachEvent('onload', downloadJSAtOnload);
else window.onload = downloadJSAtOnload;
</script></body></html>
```

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[3] JavaScript reference by Mozilla,“https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference”

[4] Official Adobe photoshop scripting Guide, “http://wwwimages.adobe.com/www.adobe.com/content/dam/Adobe/en/products/photoshop/pdfs/cs6/Photoshop-CS6-Scripting-Guide.pdf ”

[5] Official Adobe JavaScript reference, “http://wwwimages.adobe.com/www.adobe.com/content/dam/Adobe/en/products/photoshop/pdfs/cs6/Photoshop-CS6-JavaScript-Ref.pdf”

[6] Smashing magazine article on how to make first adobe script,25th july 2013 “http://www.smashingmagazine.com/2013/07/25/introduction-to-photoshop-scripting/”

BRIEF RESUME

HARSH BHATIA

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harshbhatia296@gmail.com
slashharsh@hotmail.com

OBJECTIVE :

By enhancing my inherent features and acquired skills through team effort, continuous learning, sheer hard work, I want to achieve professional excellence for the upliftment of my organization.

EDUCATION :

2006-2007 Maharishi Vidya Mandir, Bhandara(Maharashtra)

Passed AISSCE 10th Board with 87%

2008-2009 Central Academy, Kota(Rajasthan)

Passed AISSCE 12th Board with 81%

2010-Present Jaypee Institute of Information Technology, Noida(U.P.)

Currently pursuing 4th year(7th sem) B-Tech degree Computer Science Engineering at Jaypee Institute of Information Technology, Noida (U.P.) with CGPA 7.0.
Expected graduation date May-2014.

INDUSTRIAL TRAINING :

Internship cum training in The Fingo (thefingo.com), for duration of 6 weeks on Django website development and Testing. Creation of a continuous integration build-bot for test-driven-development.

PROJECTS UNDERTAKEN :

- **Www.harshbhatia.net**

  Personal website design for sketch display and portfolio display.

- **Sharpy:**

  A File sharing application for users on local connected network in python.

  Users can control on access of contents and notified of changes in particular file.

- **Color Mouse**

  An OpenCV based application uses webcam to detect red and blue color to control mouse cursor. The application also performs primary mouse task of right and left click.

- **Click Pic**

  An application using OpenCV library to edit live stream into various format and filters. This app allows user to click and save pictures in all of filters.

- **Mélange : Static Website Builder**

  A static webpage builder designed in html, Jquery, Object oriented JavaScript, equipped with latest css3 and html5 effects. The website allows user to create webpage by simple drag and drop element and gives a freedom to download the source code into their local storage**.**

- **Image Razor:**

  An Image editing tool in JAVA language with simplest graphical-user-interface. This software allows user to convert an image into different types using 25 various image-filters.

- **Sickliness Reference Data Labs**

  A medical database website(on local server) under database management for doctors on various diseases using PHP, Html and fully functional css3. This website serves as a data reference to doctors to answer different queries related to diseases, their symptoms, cure etc.

- **Sudoku Solver**

  A user friendly Sudoku solver in C(intermediate level) using data structures and graphics.

- **Writing-pad**

  A Google-chrome-extension for saving notes, links and passwords etc. No sign up is required as this project uses latest HTML5 function of local storage to store the data into users computer, the data stays in the writing pad even after the session completion or shutdown.

- **TIC-TAC-TOE**

  A Two player traditional tic-tac-toe(cross-O) game in C language.

ACHIEVEMENTS :

- Volunteered in International Conference of Contemporary Computing -2012 held at Jaypee Institute of Information Technology, Noida.
- Participated in the "The Noble Conclave:Apoogee-2012" at BITS Pilani.
- Organized "Roopantar" : Artwork Exhibition of Personal Pencil sketches in collaboration with other artist at the annual fest in College.
- Awarded for highest marks and cent-percent in math subject in school in 10th class.
- Student Member of Creative society of college.
- Awarded various prizes in Drawing at district level.

SKILLS And HOBBIES :

- C/C++,Python,HTML,CSS3, JavaScript
- Pencil sketching with different graphite pencils.
  (Face-book fan page : " https://www.facebook.com/Harsh.BhatiaOfficial")
- Badminton and lawn Tennis
- Paper engineering and creative artwork