Web Compiler

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ABSTRACT

Most of the websites are made in HTML. There is a website which facilitate user to upload a page and find error in it. Thus, website will be able to find many missing tags or incorrect tags also. It will show the lines of errors. It displays the semicolon error, curly brackets error, properties error. Most of the websites are made in HTML. The HTML page can be made in many text editor. There are many text editor and frameworks, which gives the facilities to build HTML page. So, there is a website which facilitate user to upload a page and find error in it. It will shows the lines of errors. C programs are compile only in Turbo C, but in web compiler if program written n text editor like notepad than compiler can also compile the program and finds the error and display the in which line error is occur.

Keywords : HTML, CSS, C, Tags, Syntax, Compiler.

I.INTRODUCTION

1.1. PROJECT SUMMERY

In current compiler convert source program to machine program and show the output. A compiler usually has two steps: 1) It reads the text and makes note about how the words and sentence go together. 2) If the words don't makes the sense, It will try to tag the programmer C programs are run in Turbo C only. C compiler shows the error but not in perfect manner. Example- If error is occur in any line, but it shows the lines but it does not shows the perfect error some times. No runtime checking in C language. C does not have the concept of namespace. .NET has its own library for all types of tags and syntax. So, it works according to that library, if any external error like CSS and HTML occur in the program and it is not available in the given library. So, the error cannot be solved and it makes the problem and there is no any compiler for HTML and CSS.Websites are mostly made in HTML. The HTML page can be made in many text editors. There are many text editor and frameworks, which gives the facilities to build HTML page. So, there is a website which facilitate user to upload a page and find error in it and get the solution of it. Thus, website will be able to find many missing tag or incorrect tag also. It will show the lines of errors.

C programs are compile only in Turbo C, but in web compiler if program written in text editor like notepad than compiler can also compile the program and finds the error and display the in which line

error is occur. In CSS, web compiler finds the syntax error. Its checks errors and if error are generated it generates the error message.

1.2 PURPOSE

The main aim of Web Compiler is to provides facilities to user to upload a page and finds errors in it. This website will be able to find many missing tags or an incorrect tag also. It will show the lines of error. User will be able to upload a webpage which will be checked and then the lines with missing tags or incorrect tags will be shown.

1.3. SCOPE OF SYSTEM

The Web Compiler is basically made for anyone who wants to check coding files like HTML/CSS/C can use this website.

1.4. OBJECTIVE

- To save the time.
- To allow user to upload a page and find error in it.
- To solve the errors as soon as possible.

1.5. TECHNOLOGY AND LITERATURE REVIEW

The Key Technologies used in developing the Educational Social Network are:

1) **Servers:**
   Microsoft SQL Server 2008

2) **Clients:**
   Microsoft Windows 7 or more
   Microsoft Office 2010 / 2013
   Mozilla Firefox
   Google Chrome

3) **Tools:**
   Microsoft Visual Studio 2010
   Notepad/Notepad++
   Microsoft Visio 2007
   Paint

We have utilized SQL server as the basic database.
The use of SQL Server was finished by investigating system analysis and design.

1.6 PROJECT PLANNING

Effective management of a software project depends on thoroughly planning the progress of the project. A well-planned strategy leads to the best and optimal use of the resources available and ensures completion of project on time. Project plan sets out the resources available to the project, the work breakdown and a schedule for carrying out the work. The project needs a lot of research and thus scheduling was a difficult task as there was a need for carrying out a lot of study about various algorithms and techniques and testing them at various stages, thus maintaining the schedule was also difficult.

Systems Development Life Cycle Method
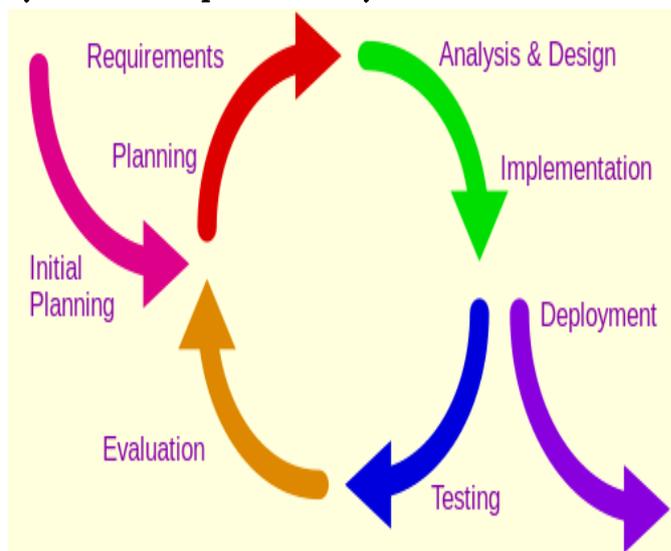
Figure 1.6 Iterative Waterfall Model

Justification:

In the Software Development Life Cycle, there are different stages for requirement gathering, feasibility study, requirement determination, designing, coding and implementation and then testing and debugging so we can first identify requirements and we can do the feasibility study. Thus it is beneficial to first identify the requirements and then through feasibility study we can analyze these requirements and determine them for implementation. Then after gathering all necessary requirements we can easily design them and then the implementation becomes

very easy and faster. The Requirements are very fuzzy then that enforces us to choose a model that allows us to move back to any previous phase of the development life cycle, make changes over there, & again get it implemented in the next phase. This repeats until the satisfactory level is reached. Thus as and when requirements arise the changes can be made in the system in a very short period of time. Take like one example Design Phase is going on and the client came upon with a new requirement, so this could only be achieved if we are allowed to move back to the Analysis Phase. This makes it clear why we have chosen "*Iterative Waterfall Model*".

1.7 Project Plan

The project plan sets out the resources available to the project, the work breakdown and a schedule for carrying out the work. The project plan should be regularly revised during the project. Some parts such as the project schedule will change frequently. The plan of developing Educational Social Network is to fully operate at a high level of efficiency and all the company members and administrator associated with the system should understand its advantage. The system solves the problem. It is intended to solve as requirement specification.

COMPONENT	MINIMUM REQUIREMENTS
PROCESSOR	Core 2 Dual (min 2.0 GHz)
RAM	2 GB RAM
HDD	120 GB HDD
MOUSE	ANY MOUSE
KEYBOARD	120 KEYS
MONITOR	LCL or TFT MONITOR
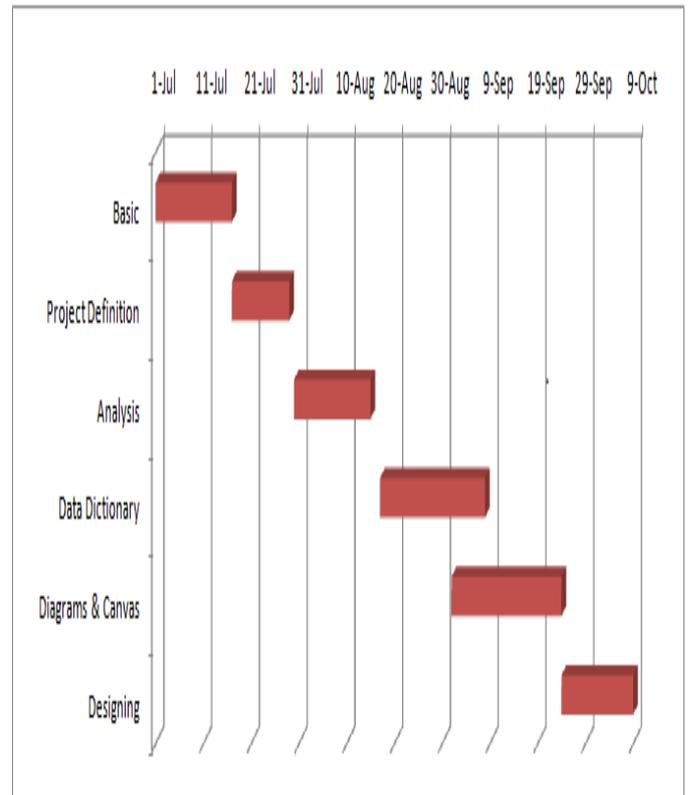
II. SYSTEM ANALYSIS AND DESIGN

2.1 HARDWARE AND SOFTWARE REQUIREMENTS (MINIMUM REQUIREMENTS TO RUN YOUR SYSTEM)

2.1.1 Hardware Requirements:

Table I Hardware Requirement

2.1.2 Software Requirements:

Table II Software Requirement

COMPONENT	TOOLS OR TECHNOLOGY
Operating System	Windows 7 or Higher
Front End	Asp.Net with C# (Microsoft Visual Studio 2010)
Back End	MS SQL server 2008(server less)

Application	Microsoft Visual Studio 2010
	Microsoft Office 2010 / 2013
	Microsoft Office Visio 2007
	Notepad/Notepad++
	Paint
Web browser	Mozilla Firefox, Google Chrome, Internet Explorer

III.SYSTEM ANALYSIS

3.1 USER CHARACTERISTICS:

The users are being classified according to their role of using system and in this system there are six users and they are as follows:

- **Admin:** Admin is the one who has access to the site features and all other administration features within Web Compiler.

Its specific functions are:-

- Admin can manage website.
- Admin can manage its own profile as well as users profile.
- Admin can add users.
- Admin can remove users who is uploading unnecessary files.
- Admin can add the category.
- Admin can add the tags.
- Admin can add syntax .

- **End User:** End User is the one who can find the solution for their uploaded page within Web Compiler.

Its specific functions are:-

- End User can registered.
- End User can login.
- End User can select category like C, CSS,HTML.
- End User can upload page and gets the solution.
- End User can manage the profile.

3.2MODULE DESCRIPTION:

3.2.1Reduction of process time

- Compiler will check the extension whether the file is .html, .CSS or .C.
- Compiler removes the unnecessary lines which is not required in file like comment or blank line.

3.2.2 Syntax Checking

- It perform the extraction of word .
- And it will extract the word from the database.
- Compiler checks the syntax in the file.
- Compiler compares the syntax or tags with database.

3.2.3 Output Generator

- In this compiler will display the error and also display in which line error is occurs.
- It perform the execution of file.
- And also provide the solution for error files.

3.2.4 Category

- User can select the category by categories vise.
- User can upload the page category vise.

3.3 STUDY OF CURRENT SYSTEM

Compiler convert source program to machine program and show the output. C programs are run in TURBO C only. C Compiler show the error but not in perfect manner. Example like, if error is occur in any line, then Compiler shows that line but it does not show the perfect error sometime. No runtime checking in C language. .NET has its own library for all types of tags and syntax. So it works according to that library. If any external error like occurs in the program and it not available in the given library so the error cannot be solved and it makes the problem. And there is no any Compiler for HTML and CSS.

3.4 PROBLEM AND WEAKNESS OF CURRENT SYSTEM

- It is time consuming.
- Compiler can be difficult to understand and modify.
- Compiler does not detect many programming mistake.

- Compiling large number of files is very slow.
- And yet, there is no particular compiler for HTML and CSS. So user gets the trouble in finding the error in C, HTML and CSS.

3.5 MYTHS

Some believe that static analysis tools are nothing more than glorified compilers, and because they already have great compilers which do a fine job of flagging problems in their code, they see no need for SCA tools. Now you could also be thinking: "Well, I would've found that one on my own. So would any good developer."The fact is, some people think static analysis is really only helpful to less experienced developers, and that static analysis tools only find pretty basic errors.

Myth #1: Static code analysis goes much deeper and finds more complex issues than compilers can

Compilers are essential, but their analysis capabilities are limited to the context of your file and the function you're working with. They can't go beyond that. Static analysis, on the other hand, can help you find deep, inter-procedural issues, issues from across your entire system, extra dependencies and problems like that. The static analysis tool found an additional null-pointer dereference. It is indicating that the document, which comes from 'GetDocument', will potentially be dereferenced if it comes back as null. The tool looked deeper into what 'GetDocument' does to show that it could potentially return a null, which you would end up de-referencing. And it also detected a piece of unreachable code. These items are small, we admit, but they are just a couple examples of the deeper, extra value a good static analysis tool provides.

Myth #2: Static analysis helps all developers become more effective

It can be quite hard to find vulnerabilities, errors and violations in large, complex code bases, particularly when it comes to the inevitable, unfamiliar third-party or legacy code. As much as we wish it was not the case, most software we write involves some dependency on legacy code. This can introduce issues that originate many files deep, where you're not even sure how the code was written or what it is really meant to do.That's where the complex error detection and concurrency checkers in SCA tools will be extremely valuable. They help even the most experienced developers find and resolve issues they just couldn't find and fix as quickly or easily on their own.In his research, Capers Jones of Namcook Analytics found that, without tools and processes like static analysis and code review, developers are actually less than 50 percent efficient at finding bugs in their own software.That's why, as developers, it's important to work with others, on a team, and to embrace the best tools for the job. As you're writing code, it's good to get feedback from a variety of sources and be able to spot and resolve issues quickly. Good SCA tools help you do that. The error code SV.XSS.REF is reported for line 109. This is known as a reflected cross-site scripting (Reflected XSS) vulnerability. The analysis indicates that 'transferFunds' contains data from an HTTP request parameter that might be tainted, stemming from the code on line 73. The 'get RAW parameter' data value on that line is being used in the confirmation message on line 109.As written, this unvalidated user input is being used for the web application output, and may contain arbitrary HTML and JavaScript. The exposure is that a malicious script could be injected here to cause sensitive data to be displayed in a browser and exploited.This is just one example of how SCA can be tuned to help developers of all skill levels find and fix security issues more rapidly.

Myth #3: Static analysis is noisy, generating too many false-positives

It's important to realize that for static analysis tool makers, the emphasis is actually skewed toward reducing false-negative results. We don't want our tool to pass over issues in your code that could potentially be very important. So, as we see it, it's better to call out some issues that may prove to be false than to miss real issues.That being said, the depth and breadth of analysis, combined with accuracy and ease of customization, are critical features of strong

SCA tools. The ability to tune the analysis engine to the particular security, defect and coding standards appropriate for each customer is key.Best-in-class static analysis tools also allow you to mark areas of code as 'ignored' or 'accepted' so you can apply direct control over certain, acceptable false-positives. These tools should allow you to actually "teach them" how to properly handle different characteristics of your code.The best way to reduce false-positives is to use a tool that enables you to tune or adjust the analysis behavior to your specific needs. A good tool vendor will also offer an easy process to submit false-positive reports and be open to this type of feedback in a way that lets them replicate the problem and refine their products to yield even better results going forward.On the flip side, it's important to also note that developers can sometimes misinterpret real issues as false-positives.

Myth #4: It's the job of the test/QA team to find the defects we don't need a development tool for that

We strongly disagree with this myth. Software security breaches and performance failures can happen in many places, and that certainly includes at the source code level. When it's your code that breaks or is exploited, it's embarrassing, disruptive or worse. 8ROGUEWAVE.COM.The reality is that 80 percent of defects are introduced during the development phase, while code is being written. So if you can find and fix your weaknesses and errors quickly and easily, before they get checked-in to the build and to QA, it's actually far better for everyone. We doubt you love having someone else point out errors in your code, sending you feedback that translates into you spending more time understanding the issues and fixing them.

IV. FEATURES OF NEW SYSTEM

Our new system has totally new and extra features in the comparison with the old one. There are various features in the system like:

- A User who wants to upload the file they have to register online through the website.

- A User can also find the solution for their page through website.
- This website will able to find may missing tags or an incorrect tag also.
- The system shows the lines of error.

V.WEAKNESS OF CURRENT SYSTEM

- C compiler can be difficult to understand and modify.
- C compiler does not detect many programming mistake.
- Compiling large number of files is very slow.
- Require more memory for the execution.
- And yet, there is no particular compiler for HTML and CSS.
- So user gets the trouble in finding the error in HTML and CSS.

VI. SUMMARY OF PROJECT

6.1 LIMITATION

- This website will allow to only works with three files.
- Always required Internet.

6.2 FUTURE ENHANCEMENT

- This project can be used in the after adding some more useful modules in the project for which are providing services.
- At most care and back-up procedures must be established to ensure 100% successful implementation of the computerized system.
- This website can add the more categories like xml file.

VII. CONCLUSION

We have completed our project work based on using software engineering and system analysis and design approach. This project is designed to satisfy the requirements of user. While developing this project we have learnt a lot about the compiler, we have also learnt how to make it user friendly (easy to use and

handle). This website will gives efficient solution to the error for CSS and HTML.

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