3.2.3. Software System Attributes

**3.2.3.1 Reliability**

Reliability of a website is indispensable attributes. Website has vastly increased the database they work with and E-learning website is not exceptional. In the large amount of database we work with, if the site is not reliable, the objective of our website can be made.

Nowadays, learning online is a popular form of learning in Vietnam. Each website has their own advantage in this competitive environment. Our website has it too. There are five point of reliability that we target to (validity, currency, content, purpose, accuracy)

In addition, if a website is unreliable especial learning online website, they cannot attract more students to join in and work inefficient. If your website can make added value, it may cause that website down and no more work in the future.

**3.2.3.2 Availability**

In reality, availability is a big asks for any school or learning center. There are many problems that cause you cannot join to class. However, learning online in our website can solve it.

On the Internet, our e-learning website like normal website work expects availability almost time of the year. Website allow user to browse it easily in many different browser type: Google Chrome (version 21 or higher) Mozilla Firefox (version 14 or higher)

**3.2.3.3 Security**

Web security is the most overlooked aspect of securing data. In “e-learning-website”, user data contain sensitive information so it is deal with special way.

User Data Security

When user registers with an account, he/she provide some private information for system to recognize. We encode password in MD5 type for security. Each time user login/change password, the content of password encode to MD5 type for compare with the data in DB.

Website Content Security

Internet security is a fast moving challenge and ever present threat. There is no one right way to secure a website and all security methods are subject to instant obsolescence, incremental improvement, and constant revision.

The “E-learning-website” provides Exam”Đề thi” function for test online that only register user can join in. So that function haven’t show up if user is not login. Even user may know the link direct to that function, website must check login before they use

**3.2.3.4 Maintainability**

Maintainability is the degree to which a product can be maintained or repaired easily, economically, and efficiently. In normal information system, it contains maintainability too. If the change is simple (say, changing the label on a button), the modification will be made immediately. But the delay in releases and deliver to customer means that modification will not be available for a long time, may be some week or even months

A website needs to be maintained as well as developed. Designers of websites need to consider how easy the site will be to add onto and to maintain during its lifetime. But the change of website can immediately to user, like interface of Home Page, or some addition function.

**3.2.3.5 Portability**

Portability in website is the usability of the same website indifferent environments. The pre-requirement for portability is the generalized abstraction between the application logic and system interfaces. When website is browse with the same functionality is produced for several web browsers, portability is the key issue for development cost reduction

Our website has family interface with end-user. The website will have the same look in many browsers.

**3.2.3.6 Performance**

In model life, people want to use things that work instantly. They can pay money for reduce the time delay to not waiting more. In your case, annoying a few users wouldn’t be much of a problem, but if millions of people are using your product, you’d better be snappy in delivering it.

Even if you don’t have millions of users (yet), consider one very important thing: people are consuming the Web nowadays less with fat connections and massive computers and more with mobile phones over slow wireless and 3G connections, but they still expect the same performance. Waiting for a slow website to load on a mobile phone is doubly annoying because the user is usually already in a hurry and is paying by the byte or second. Our “E-learning-website” will provide normal speed of loading page and handle function.

In addition, the display content of our website is easily to understand, remember for student we target, High school student. It’ll make our website as a effective way to learning, special learning online