INTRODUCTION

The purpose of this document is to define scope and requirements of a web-based Regular Expression Editor for the developers of a software services company. The proposed system will aid the developers in rapid development of regular expressions. Currently, they test the regular expression as part of the module thereby making the development & testing more complex.

This document is the primary input to the development team to architect a solution for this project.

System Users

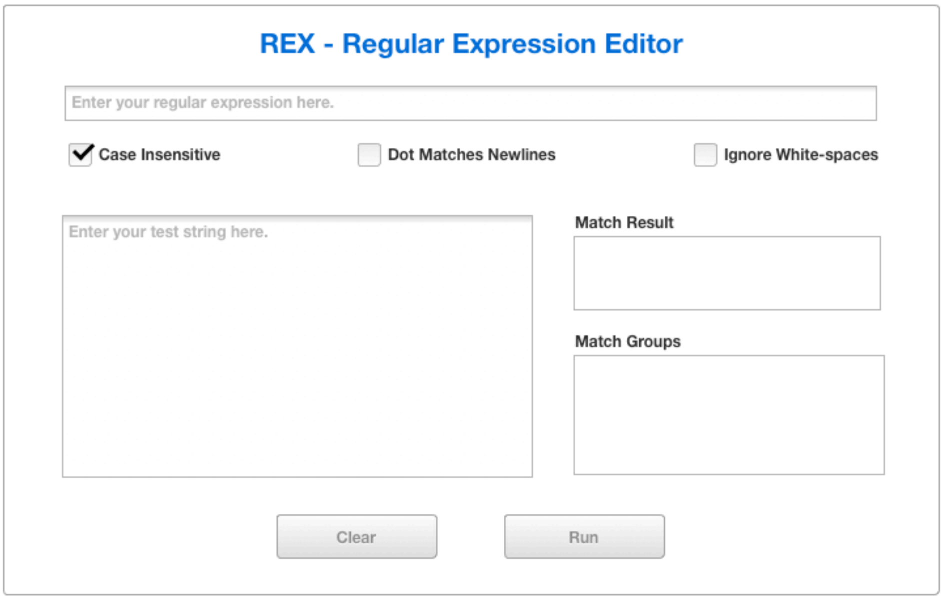
The entire team of developers of the software services company is expected to benefit from the regular expression editor, REX.

Assumptions

1. REX will be integrated with the existing company's intranet and therefore it will leverage the existing Intranet's authentication mechanism.
2. It is assumed that the standard java.util.regex package will be used for the development.

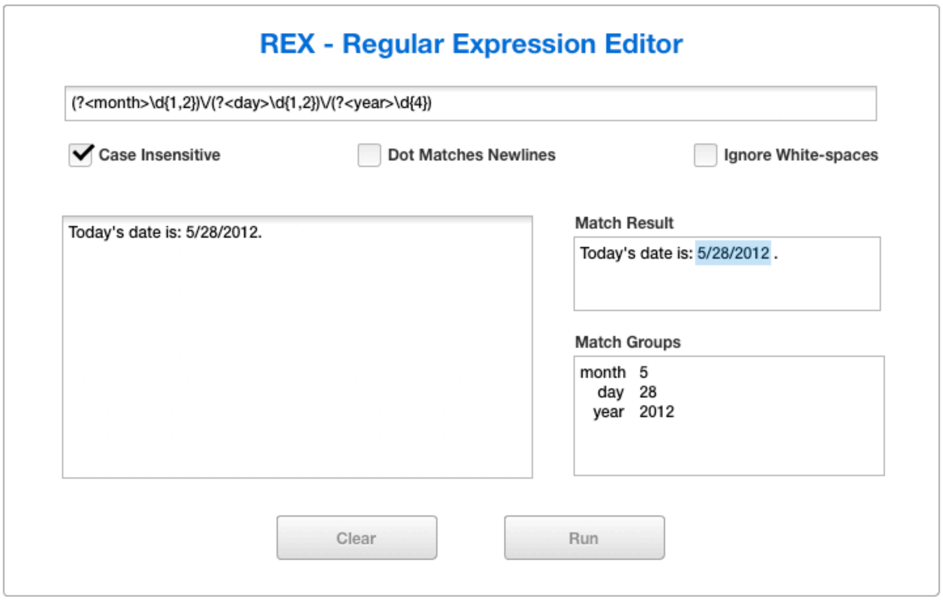
REQUIREMENTS

REX will allow users to easily create, edit and test regular expressions. The user interface for the same is outlined below.


REX - Regular Expression Editor
Enter your regular expression here.
Enter your test string here.
Match Result
Match Groups
Clear
Run

☑ Case Insensitive ☐ Dot Matches Newlines ☐ Ignore White-spaces

The top most field will accept the regular expression from the user. The check boxes will allow selection of various options for the regex entered. The user will be able to enter the test string on the left hand side text box. Clicking "Run" button, will execute the regex with selected options on the test string and show the results in the text boxes on the right hand side. The matched results are shown highlighted in a light blue color. The matched groups are shown in multiple lines – one group per line. A sample screen of such a run is shown below.



REX - Regular Expression Editor

```
(?<month>\d{1,2})\/(?<day>\d{1,2})\/(?<year>\d{4})
```

☑ Case Insensitive □ Dot Matches Newlines □ Ignore White-spaces

Today's date is: 5/28/2012.

Match Result

Today's date is: 5/28/2012 .

Match Groups

```
month  5
  day  28
 year  2012
```

Clicking “Clear” Button will clear the form and it will be ready for another regex editing and/or testing.

Optional Requirements

It is highly desirable to provide a capability to save tested regex in to a library, so that they may be reused in future. In this case, user will be able to save each regex with a “title” and a “description outlining its purpose”. A list view of all saved regex will be available for browsing the library.

Since REX is expected to use Intranet’s authentication, for the purpose of this project, entering user name will take you to the user’s REX screen. You may create sample users directly from the backend database.

DEVELOPMENT ENVIRONMENT

REX will be developed as a web application using Java/JSP and DB2 database. Eclipse will be used as the IDE for the same. You may consider using a JavaScript framework like jQuery/Prototype/ Scriptaculous.