I would like to enforce strong password for users in redmine. As if now redmine will accept any four letter password. Is there a way that application checks how strong a password is when a new user register in it.

Can we implement any password generator with redmine?

**Related issues:**
- Related to Redmine - Feature # 3872: New user password - better functionality
- Related to Redmine - Feature # 3155: Password policy and secure logon procedure
- Duplicated by Redmine - Feature # 25054: Enforcing Strong Password in Redmine

**Associated revisions**

Revision 18411 - 2019-08-29 03:35 - Go MAEDA

Force passwords to contain specified character classes (#4221).

Patch by Takenori TAKAKI.

Revision 18412 - 2019-08-29 04:15 - Go MAEDA

Update locales (#4221).

Revision 18413 - 2019-08-29 09:15 - Go MAEDA

Update locales (#4221).

Revision 18414 - 2019-08-29 10:46 - Go MAEDA

Send security notifications when password_required_char_classes setting is changed (#4221).

**History**

#1 - 2009-11-16 19:37 - Jean-Philippe Lang

As of r2678, you can specify the minimum password length in settings.
But a minimum password strength setting could be also added (eg. Fair, Strong, Very strong) using kind of password strength meter.

#2 - 2009-11-19 20:35 - Jean-Philippe Lang
But a minimum password strength setting could be also added (eg. Fair, Strong, Very strong) using kind of password strength meter.

I would love to see this!

Can we implement any password generator with redmine?

- Implemented in v2.4.0 - Feature #3872 New user password - better functionality

The new feature implemented in 2.4.0+ referring to Feature #3872 includes a secured password generator. However, if users may change their password at first login, they may pick “aaaaaaaa” which is far away from being secure. Thus, I also recommend to add a kind of password security check as suggested by jim joseph. Please reopen ticket. Thanks a lot!

There are some recent efforts as I can see.

https://github.com/simonswine/redmine_password_tool
https://github.com/go2null/redmine_account_policy

But this should be a core system feature, it is a must for enterprise use.
If we can enforce password strength, Redmine will be used in environments where some security policy is required.

I post a patch, as I implemented the following features:
- Enable to setting password strength in admin settings
- Enable to selecting the enforce character types (Uppercase, Lowercase, Digits, Special characters).
- Validation for each enforce character types

I think the validation in attachment:enforce-password-char-types.patch should cover all ASCII special characters, such as '(', ')', '+', '-', and '_'. The following code does that.

```diff
diff --git a/app/models/setting.rb b/app/models/setting.rb
index b18f8ed9..4171fa04e 100644
--- a/app/models/setting.rb
+++ b/app/models/setting.rb
@@ -19,6 +19,13 @@
 class Setting < ActiveRecord::Base
+
 PASSWORD_REQUIRED_CHARACTER_CLASSES = {
+  'uppercase' => /[A-Z]/,
+  'lowercase' => /[a-z]/,
+  'digits' => /[0-9]/,
+  'special_characters' => /[[:ascii:]]&|[[:graph:]]&|[[:alnum:]]/
+  }
+
 DATE_FORMATS = [
  '%Y-%m-%d',
  '%d/%m/%Y',
```

Thank you Mr. Maeda.

I change a patch and post it again.
- Changed definition of 'special_characters' to the code proposed by Mr. Maeda
- Changed regular expression in validation of special characters. => Almost all special characters within the ASCII range can be used.
- Shortened constant and label names.
- On password generation, contain special characters only when special characters are required.
- Added display of usable characters such as "Change Password" Form.
#15 - 2019-08-27 11:49 - Go MAEDA
- Target version changed from Candidate for next major release to 4.1.0

LGTM. Setting the target version to 4.1.0.

#16 - 2019-08-28 05:58 - Go MAEDA
- File setting-required-character-classes-for-passwords@2x.png added

This is the screenshot of attachment: enforce-password-char-types-v2.patch. Admins can force users to include specified character classes (uppercase, lowercase, digits, or special Characters) in their password. This feature must be welcomed by many admins.

setting-required-character-classes-for-passwords@2x.png

#17 - 2019-08-29 03:35 - Go MAEDA
- Subject changed from Enforcing Strong Password for Users to Force passwords to contain specified character classes
- Status changed from New to Closed
- Assignee set to Go MAEDA
- Resolution set to Fixed

Committed the patch. Thank you for improving Redmine.

Files

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<td>2019-08-02</td>
<td>Takenori TAKAKI</td>
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