Case sensitivity for title of WikiPage under postgresql

There is a tricky problems for the ordering of WikiPages under Postgresql, the title is designed to be case insensitive.

https://github.com/redmine/redmine/blob/24ccf9d981d907ec7c8fa3901d0a79bc7f641825/app/models/wiki_page.rb#L49

But when it comes to order the wiki pages, it’s ordered in a case sensitive way, which results in the three WikiPages titled with ["Aac", "Aace_", "ABc", "Acc"] is ordered as ["ABc", "Aac", "Aace_", "Acc"] , which is not correct since "Aac", "Aace_" should precede "ABc".

A quick fix would be change the order(:title) to order('lower(title)') , patch is attached.

The order works well under mysql since mysql will order regardless of the case. But I think it should also work properly under Postgresql.

patch is attached too.

Similar for has_many :pages, lambda {order('title')}, :class_name => 'WikiPage', :dependent => :destroy

https://github.com/redmine/redmine/blob/24ccf9d981d907ec7c8fa3901d0a79bc7f641825/app/models/wiki.rb#L23, which should be

has_many :pages, lambda {order('lower(title)')}, :class_name => 'WikiPage', :dependent => :destroy

patch is attached too.

A warning occurred when I created a test and applied attachment:patch2.diff to the trunk.

diff --git a/test/unit/wiki_test.rb b/test/unit/wiki_test.rb
index b4ecd29bb..9184d4efc 100644

#3 - 2019-05-12 01:43 - Go MAEDA
- Target version set to Candidate for next major release

#4 - 2019-06-14 02:24 - Yuichi HARADA
- File fixed-31287.patch added
--- a/test/unit/wiki_test.rb
+++ b/test/unit/wiki_test.rb
@@ -52,6 +52,16 @@ class WikiTest
   assert_equal page, wiki.find_page('ANOTHER page')
 end

+ def test_ordering_pages_should_not_be_case_sensitive
+   wiki = Wiki.find(1)
+   wiki.pages.destroy_all
+   %w(Abc Aace_ AAc).each do |title|
+     wiki.pages.create(title => title)
+   end
+   wiki.reload
+   assert_equal %w(AAc Aace_ AAb Acc), wiki.pages.pluck(title)
+ end
+
+ def test_find_page_with_cyrillic_characters
+   wiki = Wiki.find(1)
+   page = WikiPage.find(10)
+$ bundle exec rake test TEST=test/unit/wiki_test.rb:56
Run options: --seed 43297

# Running:

DEPRECATION WARNING: Dangerous query method (method whose arguments are used as raw SQL) called with non-attribute argument(s): "LOWER(title)". Non-attribute arguments will be disallowed in Rails 6.0. This method should not be called with user-provided values, such as request parameters or model attributes. Known-safe values can be passed by wrapping them in Arel.sql(). (called from block in <class:Wiki> at ./app/models/wiki.rb:23)
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2020-03-18
DEPRECATION WARNING: Dangerous query method (method whose arguments are used as raw SQL) called with non-attribute argument(s): "LOWER(title)". Non-attribute arguments will be disallowed in Rails 6.0. This method should not be called with user-provided values, such as request parameters or model attributes. Known-safe values can be passed by wrapping them in Arel.sql(). (called from block in <class:Wiki> at ./app/models/wiki.rb:23)

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Finished in 0.137138s, 7.2919 runs/s, 7.2919 assertions/s.
1 runs, 1 assertions, 0 failures, 0 errors, 0 skips
$

I made a patch based on attachment:patch.diff and attachment:patch2.diff.

#5 - 2019-06-27 02:52 - Go MAEDA
- Category set to Wiki
- Target version changed from Candidate for next major release to 4.1.0

Setting the target version to 4.1.0.

#6 - 2019-09-08 17:53 - Anonymous
+1, but will commit happen? Why are we waiting?

#7 - 2019-09-28 00:33 - Go MAEDA
- Target version changed from 4.1.0 to 4.2.0

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<th>Files</th>
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<td>patch.rb</td>
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<td>2019-05-01</td>
<td>hyper loop</td>
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<td>fixed-31287.patch</td>
<td>4.15 KB</td>
<td>2019-06-14</td>
<td>Yuichi HARADA</td>
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