Bluegenes - Design Ideas

BY RIYA SOGANI

Issue 1. Filter bar for searches ————————→

- Looks slightly cluttered
- Color coding isn't descriptive
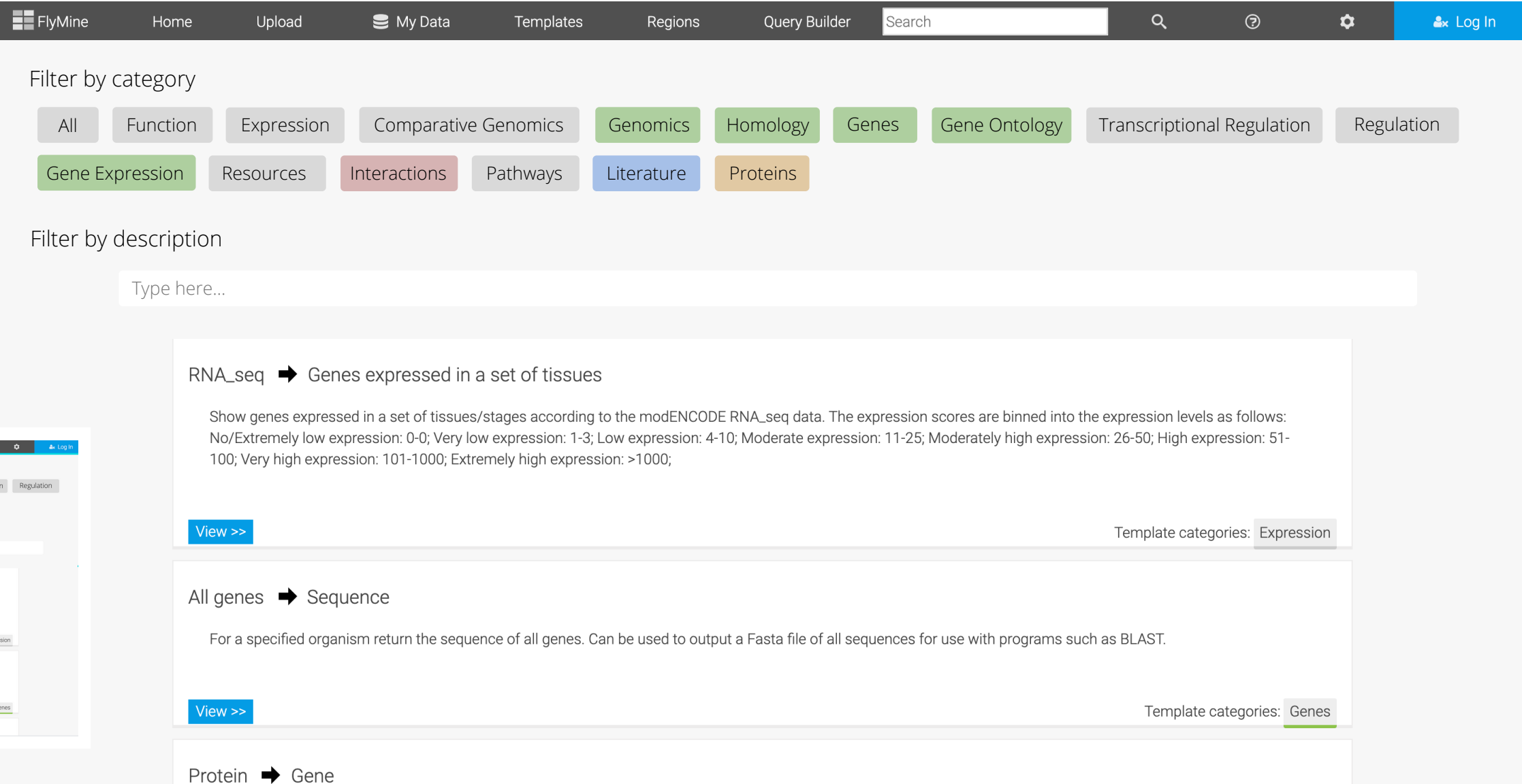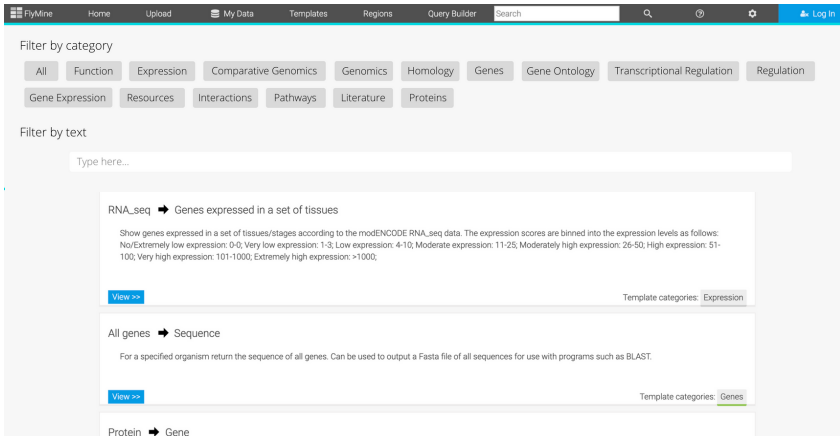- Design can be modernised

Design solution follows!

FlyMine   Home   Upload   🗄 My Data   Templates   Regions   Query Builder   [Search]   🔍   ⊙   ⚙   ⚑ Log In

Filter by category

All | Function | Expression | Comparative Genomics | Genomics | Homology | Genes | Gene Ontology | Transcriptional Regulation | Regulation | Gene Expression | Resources | Interactions | Pathways | Literature
Proteins

Filter by description

[Filter text...]

RNA_seq ➡ Genes expressed in a set of tissues

Show genes expressed in a set of tissues/stages according to the modENCODE RNA_seq data. The expression scores are binned into the expression levels as follows: No/Extremely low expression: 0-0; Very low expression: 1-3; Low expression: 4-10; Moderate expression: 11-25; Moderately high expression: 26-50; High expression: 51-100; Very high expression: 101-1000; Extremely high expression: >1000;

[View >>]   Template categories: Expression

All genes ➡ Sequence

For a specified organism return the sequence of all genes. Can be used to output a Fasta file of all sequences for use with programs such as BLAST.

[View >>]   Template categories: Genes

Protein ➡ Gene

Show the gene that codes for the following protein, with its chromosomal location and length.

[View >>]   Template categories: Genes

Solution 1:

- Increased spacing between buttons,
- Increased margins on sides and top,
- each button has rounded edges- giving it a more moderinsed design.

Note: On using the site, I have noticed that the color coding isnt necessary when filtering by category- as each button already has a description. The colors thus prove to be not only redundant but also slightly confusing. However, I'm new to databases like these, so, if color coding is required, I have provided an alternate design for the visualisation of the same.

FlyMine | Home | Upload | My Data | Templates | Regions | Query Builder | Search | Log In

Filter by category

| All | Function | Expression | Comparative Genomics | Genomics | Homology | Genes | Gene Ontology | Transcriptional Regulation | Regulation |

| Gene Expression | Resources | Interactions | Pathways | Literature | Proteins |

Filter by description

Type here...

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View >>

Template categories: Expression

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Protein ➡ Gene

FlyMine   Home   Upload   My Data   Templates   Regions   Query Builder   [Search]   Log In

Filter by category

All   Function   Expression   Comparative Genomics   Genomics   Homology   Genes   Gene Ontology   Transcriptional Regulation   Regulation   Gene Expression   Proteins

Filter by description

Filter text...

Log in to FlyMine

Email Address

Password

I don't have an account   SIGN IN

Gene ➡ Transcript + Transcripts for orthologues

Show the transcript identifiers for a particular gene and the transcript identifiers of its predicted orthologues. (Data Source: InParanoid, Dro

View >>   Template categories: Comparative

Organism ➡ GO terms + Orthologues in one specific organism

Show the GO terms for all genes in a particular organism which have an orthologue in another organism.

View >>   Template categories: Comparative Genomics   Function   Gene Ontology   Homology

Gene ➡ Orthologues in other Drosophila species

For a particular Drosophila gene or list of genes show the orthologues in the other Drosophila species.

View >>   Template categories: Homology

Gene ➡ Anopheles Gambiae Orthologues + GO terms of these orthologues

bluegenes.apps.intermine.org/default/templates

Issue 2: Login box
- logo next to login slightly confusing (why is there an x?)
- The words 'Log in' are misdirecting, as there is also a sign up option to create a new account, which users may not be immediately directed towards.

- The sentence 'I don't have an account' is not very clear due to its location next to the sign in button.
- Also, 'Sign in' and 'Log in' with the same use shows inconsistency.

Note: The overall process for a new user to create a new account (to 'Sign up') is not very clearly directed- this can be changed.

Design Solution follows!

Filter by category

All   Function   Expression   Comparative Genomics   Genomics   Homology   Genes   Gene Ontology   Transcriptional Regulation   Regulation   Gene Expression   Proteins

Filter by description

Filter text...

Log in to FlyMine

Email Address

Password

Don't have an account? Sign up here!

Log in

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View >>

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Template categories: Comparative Genomics   Function   Gene Ontology   Homology

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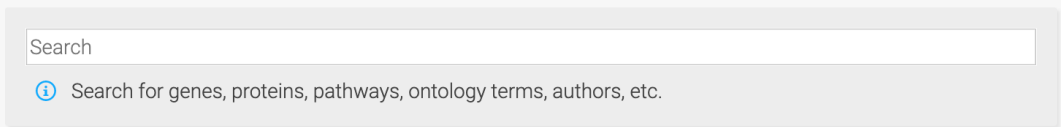
Solution 2:
- Addition of Sign Up to header
- Change from Sign in to Log in on button- for consistency
- Link to create an account has been shifted towards the left
- text of this link has been changed for clarity
- this link has been underlined to indicate presence of link.

FlyMine   Home   Upload   My Data   Templates   Regions   Query Builder   Search   Log In

Search

ⓘ Search for genes, proteins, pathways, ontology terms, authors, etc.

Lists

View | Upload

Templates

Browse

Help

Tour | Docs/Help

BlueGenes (alpha) powered by: InterMine   Cite   Contact   Chat   Blog   GitHub   ⓘ Help   Funded by: Wellcome Trust   NIH

Issue 3: Homepage

This button's functionality is to switch mines-hence the logo is misleading- it leads the user to believe the button is directed to settings, and is thus not instinctively clicked by a first time user to switch mines.

Separate search button is not necessary- it can be included in the adjacent search bar, if at all.

Huge empty area on main page- can be used to incorporate the intermine logo/bluegenes logo, as the company responsible for creating this database is not easily visually identifiable, especially on the main page.

Large help button not required. There are already 3 help buttons on the home page. The help buttons located in the menu bar above and below will suffice. Instead, this button can be replaced by a 'Switch Mines' button.

The magnifying glass icon on templates is misleading- it leads users to instinctively look at the button as a search button. Instead, it can be replaced with a template logo- just like how lists has a list logo- and browse can be written below it- just like view/upload is written below lists.

As we are currently on the 'Home' page, that tab should be highlighted. Additionally, this highlight would replace the underline which is usually seen while navigating. Eg:

FlyMine   Home   Upload   My Data   Templates   Regions

Design Solution follows!

Solution 3: all of the above changes made.

InterMine

Search

ⓘ Search for genes, proteins, pathways, ontology terms, authors, etc.

Lists

View | Upload

Templates

Browse

Mines

Switch

A Suggestion:

Margins in these, and other such pages, can be increased. It gives a cleaner look to the website.

Help

Bluegenes is a new InterMine interface that operates via InterMine's Web Services. It's actively under development, so there may be some interesting bugs - but feel free to have a look around, suggest improvements, report bugs, Contact us if you'd like to discuss anything

⑦ Chat with us

Credits

Design

Icons are a mix of fontawesome and icomoon free icons. We also use the bootstrap material design theme.

Licence

Bluegenes, like InterMine, is released under the LGPL 2.1 licence.

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SEARCH

ⓘ Try searching for something in the search box above - perhaps a gene, a protein, or a GO Term.

LOADING RESULTS

A Suggestion: In the 'expression by stage' tool, the various shades of the same color are not easy to distinguish. We could offer a wider color range ranging from green (very low expression) to yellow-green (low expression) to yellow(moderate expression) to orange(moderately high expression) to red (high expression).