Current Tasks

Genome Query 1.0 (deadline: 1 June)

- Info
- SNPs
- Show
 - Protein sequence
- Find/Count
 - Common algorithms interface for KMP, SA, K-mers (Victor, Nadya)
 - Slow inexact search (wildcards M, R, N etc.) (Alexey A.)
 - Wildcards for inexact search (Alexey A.)
 - Protein search through wild-carded DNA search (Alexey A.)
- What
- Other
 - Better layout on browser window resize
 - More crosslinks in result's output (to INFO, SHOW, WHAT queries)
 - Javadoc comments to some classes (Everybody)

Genome Query 0.3 (deadline: 11 May, feature freeze: 10 May)

- Search algorithms:
 - 🕨 🕜 Fast inexact search (wildcards M, R, N etc.)
 - WHAT command fast implementation
 - Real-time results
 - Inexact search (at least k mismatches)
 - search by shift before/after gene (Alexey A.)
- Parser:
- UI:
- History of queries
- FIND/COUNT result grouping based on locations in guery (extLoc)
- Annotation
 - repeats
- Other:
 - Javadoc comments to all classes (Everybody)

Genome Query 0.2 (deadline: 20 April, feature freeze: 13 April)

- Search algorithms:
 - K-mers for all chromosomes
 - WHAT command slow implementation
- Annotations:
 - locuses
- Parser:
 - WHAT command
- Other:
 - Javadoc comments to some classes (Everybody)

Genome Query 0.1 (deadline: 23 March)

- Search algorithms:
 - KMP
 - Suffix arrays for all chromosomes
- Annotations are used to get more precised location:
 - Search in genes
 - oprotein id
 - exons & introns

- UI:
- on the fly error checking
- better layout for info/show/count/find results
- wimprove help layout: see current right side help
- Show sample queries on startup page
- Other:
 - ability to stop long running tasks
 - sequence condensed structure
 - preprocessing script

Backlog

Search algorithms:

- (don't need) Compressed Suffix arrays (Andrew)
- BLAST

Parser

- inexact search syntax (Alexey A.)
- regular expressions (Alexey A.)
- find in protein-coding genes (Alexey A.)
- find in exons, introns, genes, genome (Alexey A.)
- alternatives for nucleotides (Alexey A.)

TODO:

- Use issue tracker!
- on the fly syntax check ?? client side with better error recovery ??
- task estimation time based on algorithm used
- better instant input validation
- think about result layout

Legend - Must have feature - Nice to have feature - Under Investigation - In Progress - Feature Implemented