
GeneLeaf Documentation

Release 1

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Genetics is the study of family relationships which transfer the information that determines the phenotype of each individual in form of discrete hereditary units called genes. The medium in which most Geneticists typically work is the pedigree diagram or genogram. In these diagrams, the relationships between individuals are represented through a simplified set of symbols, related through lines. Gene Leaf enables users to quickly capture information in this form through an intuitive user interface, which supports rapid entry of information. Gene Leaf allows users to work at their own pace and in their own way. A simplified icon set allows users to add information with simple clicks.

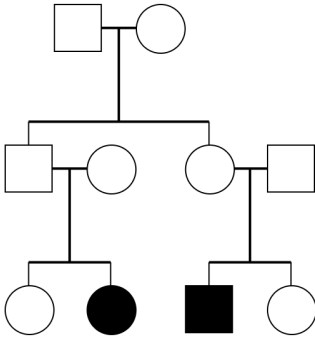
This site contains reference information on the application, including quick start guides designed to get you up and running as well as an in-depth manual to provide information on advanced topics.

GeneLeaf is a visual editor for genomics, allowing users to quickly and intuitively add and update information on family relationships. GeneLeaf is a SaaS application, which users can access securely via the web. A demo version is freely accessible for anyone interested in trying the features of GeneLeaf. We encourage you to start here and then register for an account so that you can save pedigrees for access later.

1.1 Overview

GeneLeaf uses standard conventions to represent the family relationships included in Pedigrees, as in the example below. Pedigrees are visual representations of family relationships. These diagrams follow a specific set of formatting conventions to represent family information. These include the following key components:

- Squares/Circles: used to represent males & females
- Affected: color (including black) is used to indicate that an individual is affected by a condition.
- Spousal relationships: represented by horizontal bars between individuals
- Sibling relationships: represented by horizontal bars above individuals
- Generation relationships (parents/children): represented by vertical bars

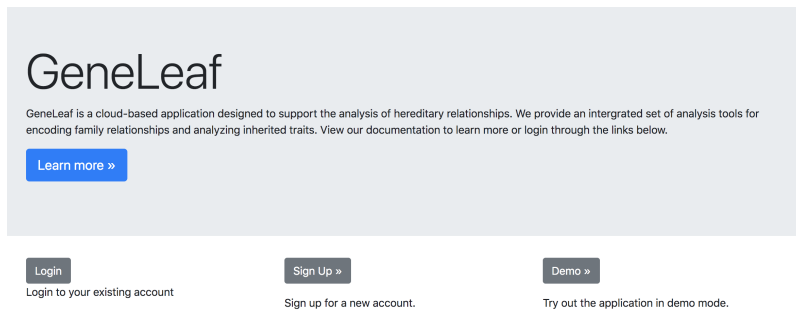


In the figure above, two cousins members (1 male and 1 female) are affected.

1.2 First Steps

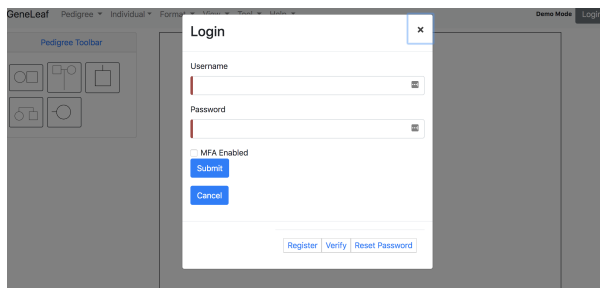
GeneLeaf is designed for ease of usability. Follow the steps below to get started:

- Intro page:



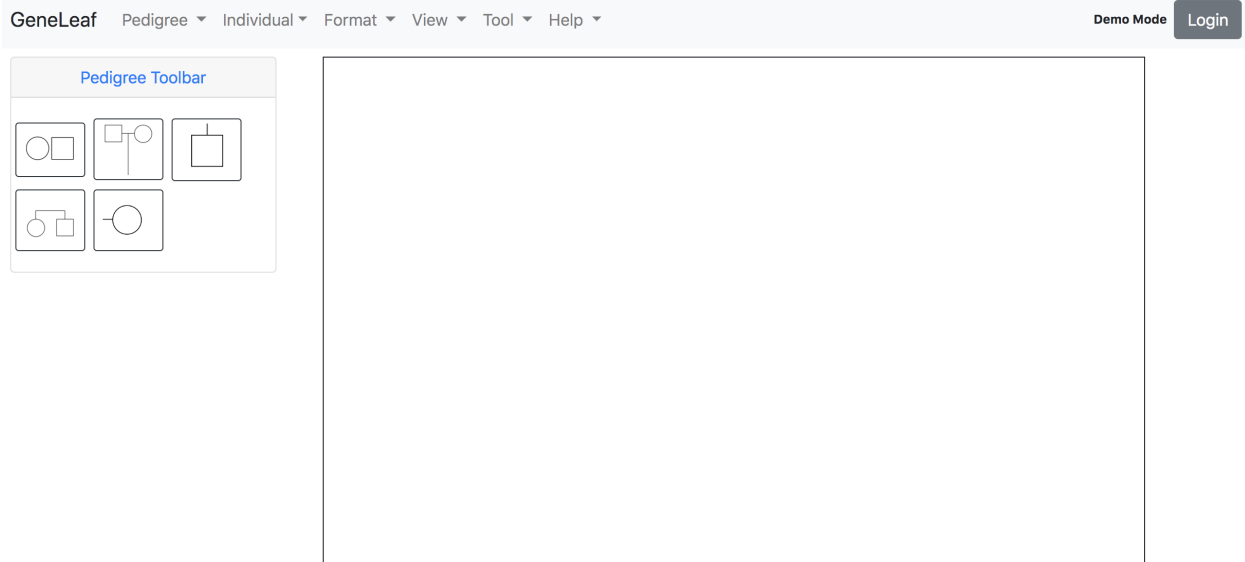
The intro page displays updates and enables users to select their preferred user experience based on their use case.

- Login:



Users can login at any point during their session by clicking the **login** button.

- Drawing Mode:



In drawing mode, users can start drawing pedigrees immediately, either using the functionality through menus or by keyboard shortcuts.

2.1 a visual editor for genomics

Genetics is the study of family relationships which transfer the information that determines the phenotype of each individual in form of discrete hereditary units called genes. The medium in which most Geneticists typically work is the pedigree diagram or genogram. In these diagrams, the relationships between individuals are represented through a simplified set of symbols, related through lines. Gene Leaf enables users to quickly capture information in this form through an intuitive user interface, which supports rapid entry of information. Gene Leaf allows users to work at their own pace and in their own way. A simplified icon set allows users to add information with simple clicks.

User Access Management

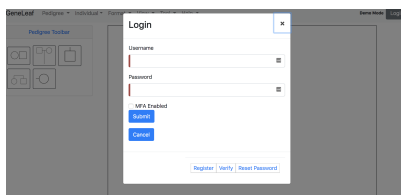
3.1 Demo Mode

GeneLeaf supports a free demo mode for users interested in evaluating the features of the application. This can be accessed by visiting the link on the intro page. In demo mode, certain features which are not available will be greyed out. Users may login at any time from demo mode by clicking the *login* button.

3.2 User Accounts

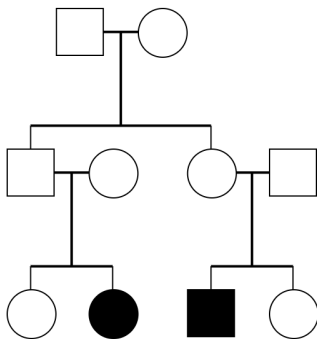
GeneLeaf supports personalized access to your data through secure authentication. Users can login at any time by clicking the *login* button, which will display the login dialog (below). Users may register for a new account through the link on the intro page.

3.3 The Login Screen



GeneLeaf supports user logins using email and password authentication. Users may additionally opt-in to multifactor authentication.

The pedigree canvas allows the user to draw pedigrees on screen.



4.1 Symbols

4.2 Keyboard Commands

CHAPTER 5

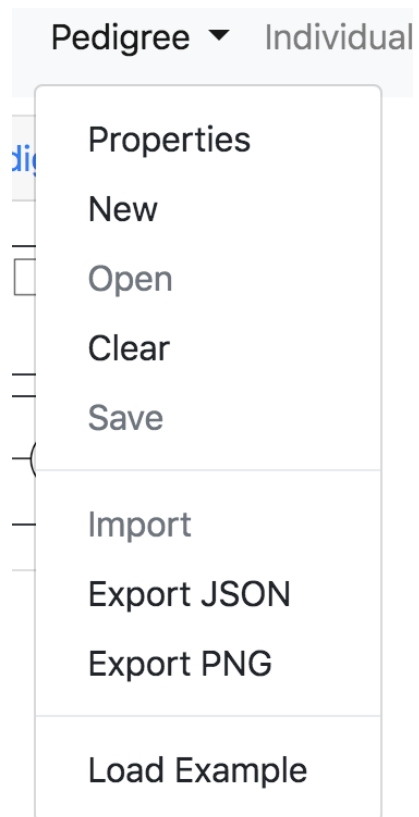
Modes

GeneLeaf controls the user experience by Modes. These determine the general properties of the user experience, as described below.

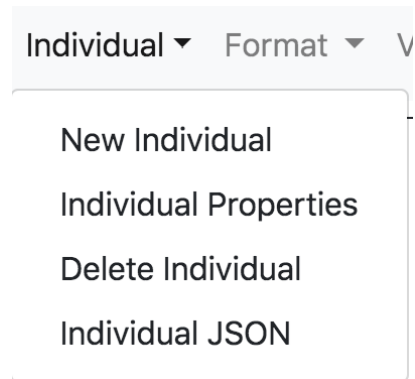
Demo Demo mode is designed to allow users to evaluate the experience of using GeneLeaf without registering for a user account. This mode is limited to use of the application without saving any information in the account. Any information generated in the session will not be saved.

Authenticated After login, users have access to their own private data sets and the menu items and commands for this will be activated.

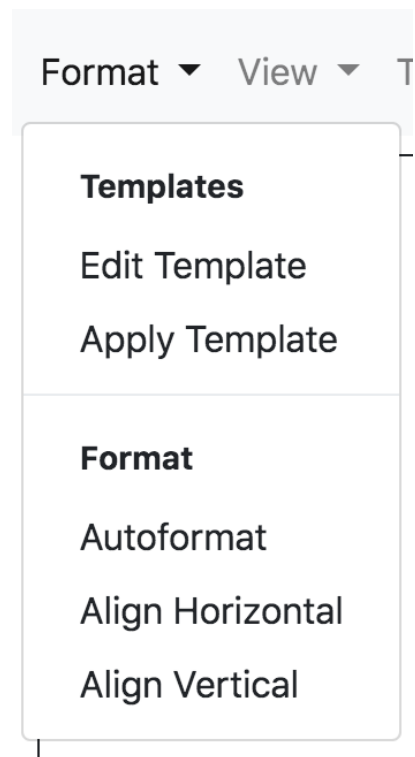
6.1 Pedigree



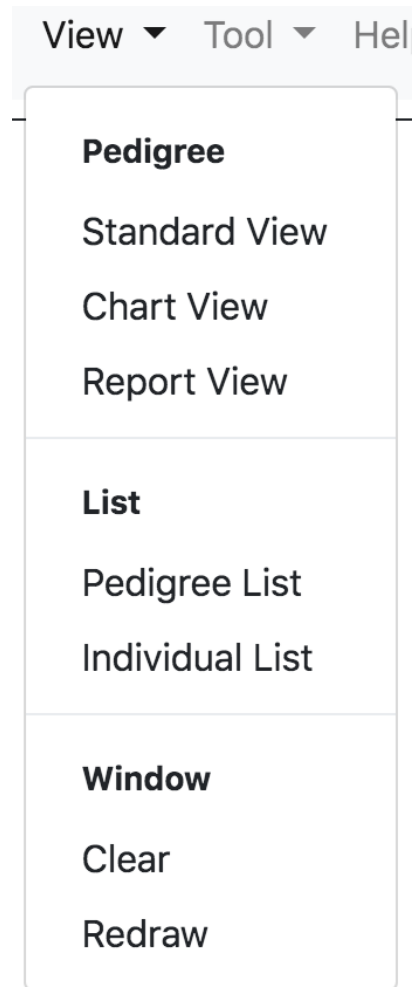
6.2 Individual



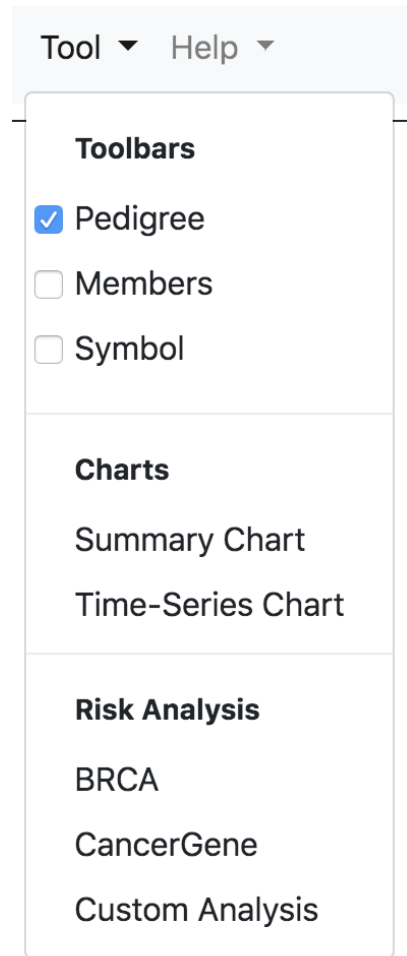
6.3 Format



6.4 View



6.5 Tool



6.6 Help

Help ▾

- Keyboard Shortcuts
- GeneLeaf Manual**
 -
 - Getting Started
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- Community**
- View License

CHAPTER 7

Toolbars

7.1 Pedigree

7.2 Members

7.3 Symbol

CHAPTER 8

Keyboard Commands

9.1 GeneLeaf Native Format

GeneLeaf supports a lightweight data model based on basic graph theory. Information on each individual is saved within a node object and connections between individuals are captured.

CHAPTER 10

Import and Export

CHAPTER 11

Data Analysis

CHAPTER 12

Keyboard Shortcuts

GeneLeaf allows users to quickly update family information. Use the keyboard shortcuts below to add information with the press of a single key.

Key	Action
Spacebar	Create Individual
p	Create Parent
s	Create Sibling
c	Create Child
m	Create Spouse
Arrows	Move
-/+	Zoom
Enter	Edit Individual
x/y	Change Sex

CHAPTER 13

Beta (4/1/2019)

13.1 Beta User Notes

Beta release for evaluation

CHAPTER 14

Version 1.0 (Summer 2019)

14.1 First Release

CHAPTER 15

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CHAPTER 16

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