Kyn User Manual

Components

- Member
    - These represent members of the family tree
    - XX meaning female
    - XY meaning male
    - Grey meaning non-diseased
    - Green meaning diseases
- Links
    - These represent links between members
    - Will always be black lines
- Link Dots
    - These represent the relationship between two members
    - Red means descendant
    - Blue means Married
- Tree
    - These represent the entire family based on one trait
    - The Kyn GUI is based entirely on the ability to build trees
- Generation
    - This is the level of age within the family calculated using the number of generations of kids
    - Kyn is special in the fact that generations do not have to be aligned along a row
    - The only requirement for vertical positioning in Kyn is that children are lower than their parents

Controls

- Left mouse button:
    - Click on all menu buttons (including pop-up menus)
    - Click on a family member once to drag, once to drop
- Right mouse button
    - Open up pop-up menus by clicking on members and link dots
- Middle mouse button
    - Create a link between two members
- Scroll wheel
    - Zoom in and out
    - +Ctrl move all members horizontally
    - +Shift move all members vertically

Usage

- Creation of trees
    - Children must be connected by a descendant link to both their parents
    - Parents must be connected by a married link
    - Children must be lower than their parents
- Saving

    - Hitting the save button will create a “.tree” file within the specified directory
    - It will not save gender or horizontal positioning due to limitations of the .tree file type
- Adding
    - Hitting the add button will add a new male non-carrier member to the tree in the upper left hand corner
- Calculate
    - This will generate a .tree file, and subsequently run the PedigreeAnalysis executable, which will output into a text file named chances
    - It will also read the contents of chances and output them to the search bar
- Search Bar
    - Search through a large category of genetic traits and diseases for information on how they are passed down