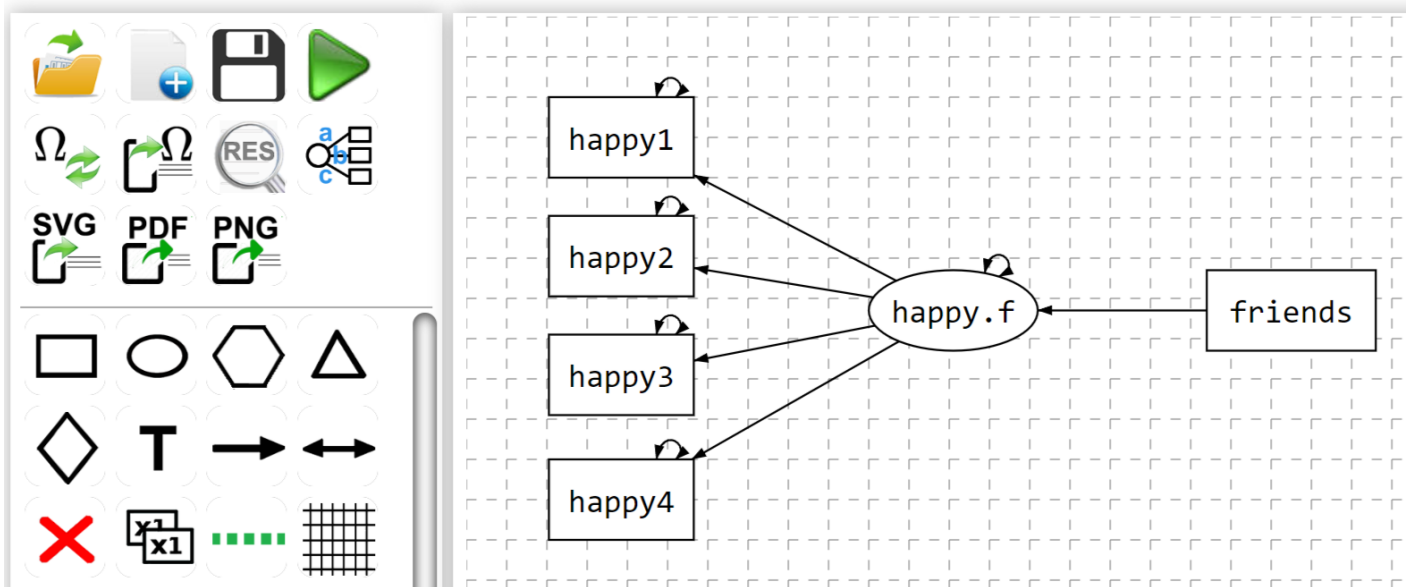# The development of the online app

The online app BigSEM uses R in the backend to run analyses on a web server. The current server setup for the working BigSEM app is below:

- Ubuntu 24.04.1 LTS
- Apache/2.4.58
- PHP 8.3.6
- MySQL 8.0.40
- R 4.4.2

However, any server that supports PHP and MySQL should work. The app can also be easily set up on a local or remote server using xampp. If you plan to use the app offline, xampp is highly recommended.

Graphical Interface

The graphical interface is developed using JavaScript. The core code is available at https://github.com/johnnyzhz/semdiag.

R Setup

One needs to install R and the networksem and TextSEM on the server first. R can be a security risk. If used on a remote server, some security measures should be taken. On our server, we use AppArmor and R package RAppArmor.

PHP for Bridging the Interface and R

We use PHP to connect to R to conduct the analysis.