

Instructions to KAMG

Two instructions to KAMG are provided:

- a video instruction at <https://www.youtube.com/watch?v=FlcindeROHY>
- a screenshot based instruction provided in this document.

Screenshot based instruction to KAMG

Fig. 01: KAMG works on Windows XP or the higher verisons of Windows OS. Windows 7 is used in this instruction document.

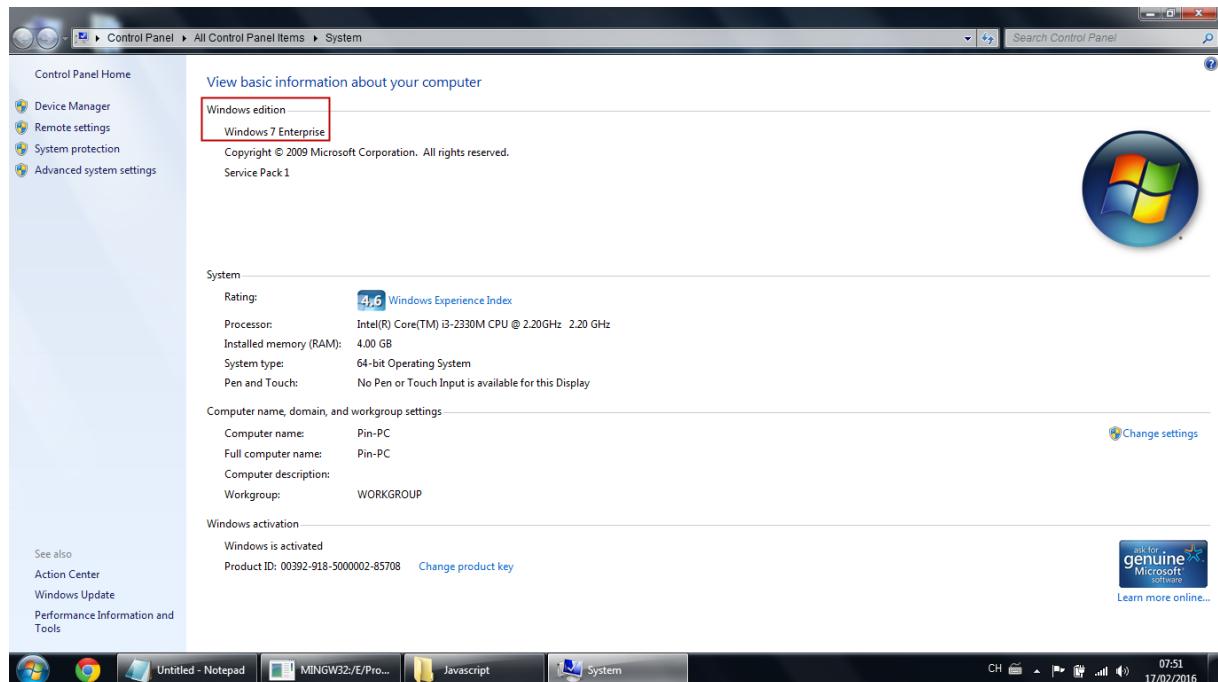


Fig. 02: KAMG works with Internet Explorer 6 or the higher versions of Internet Explorer browsers. Internet Explorer 11 is used in this instruction document.

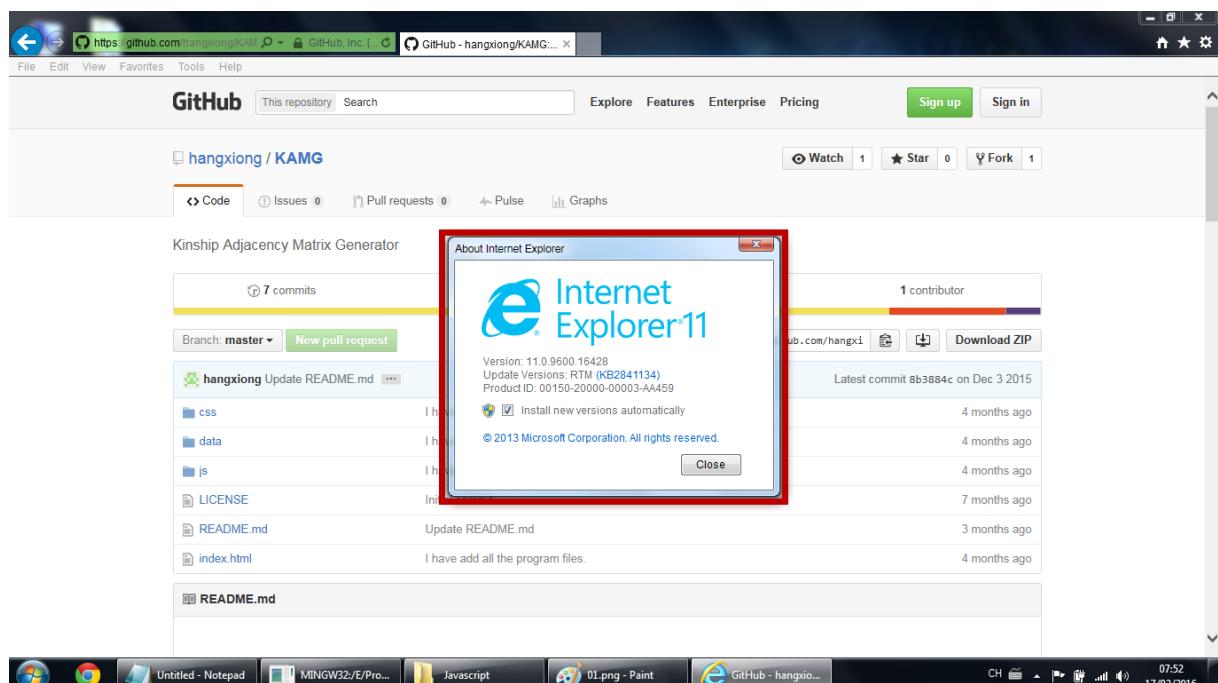


Fig. 03: Go to the github directory (<https://github.com/hangxiong/KAMG>) to download KAMG.

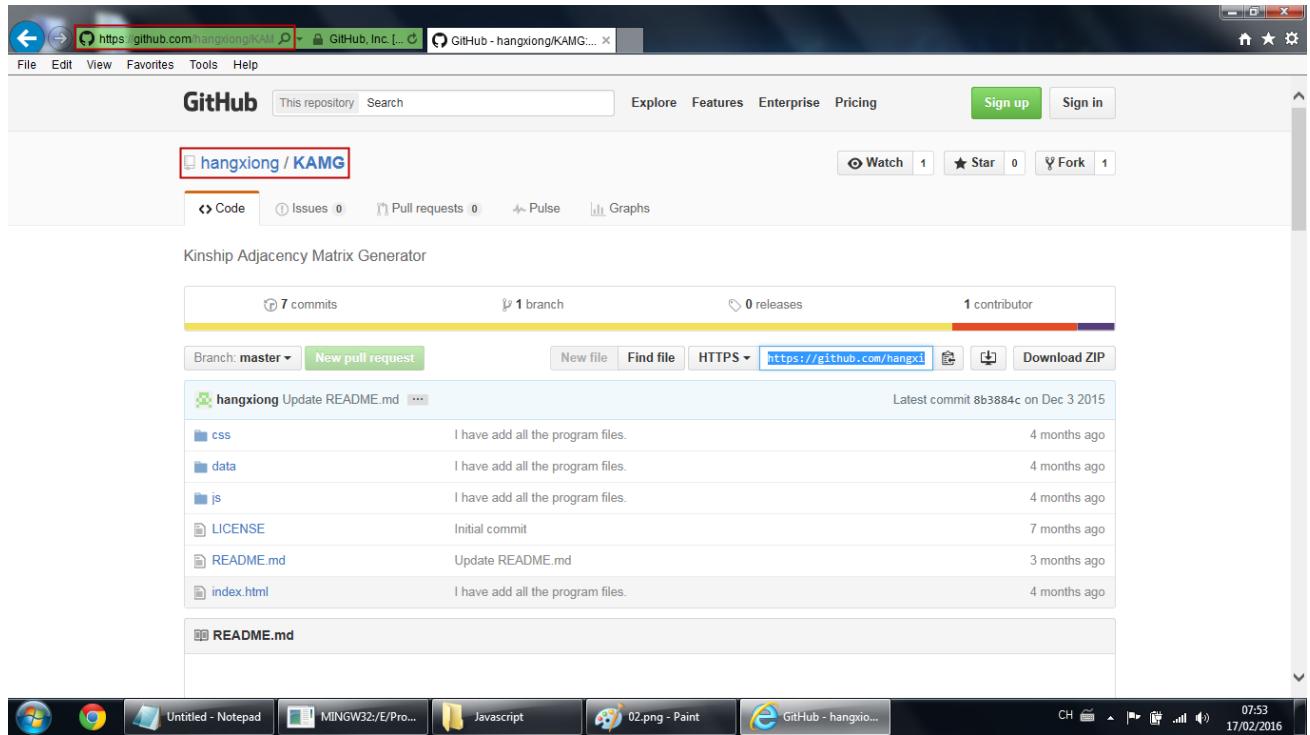


Fig. 04: Download the source code of KAMG and save it to a local directory. It is stored at E:\Programming\Javascript\KAMG in this instruction document.

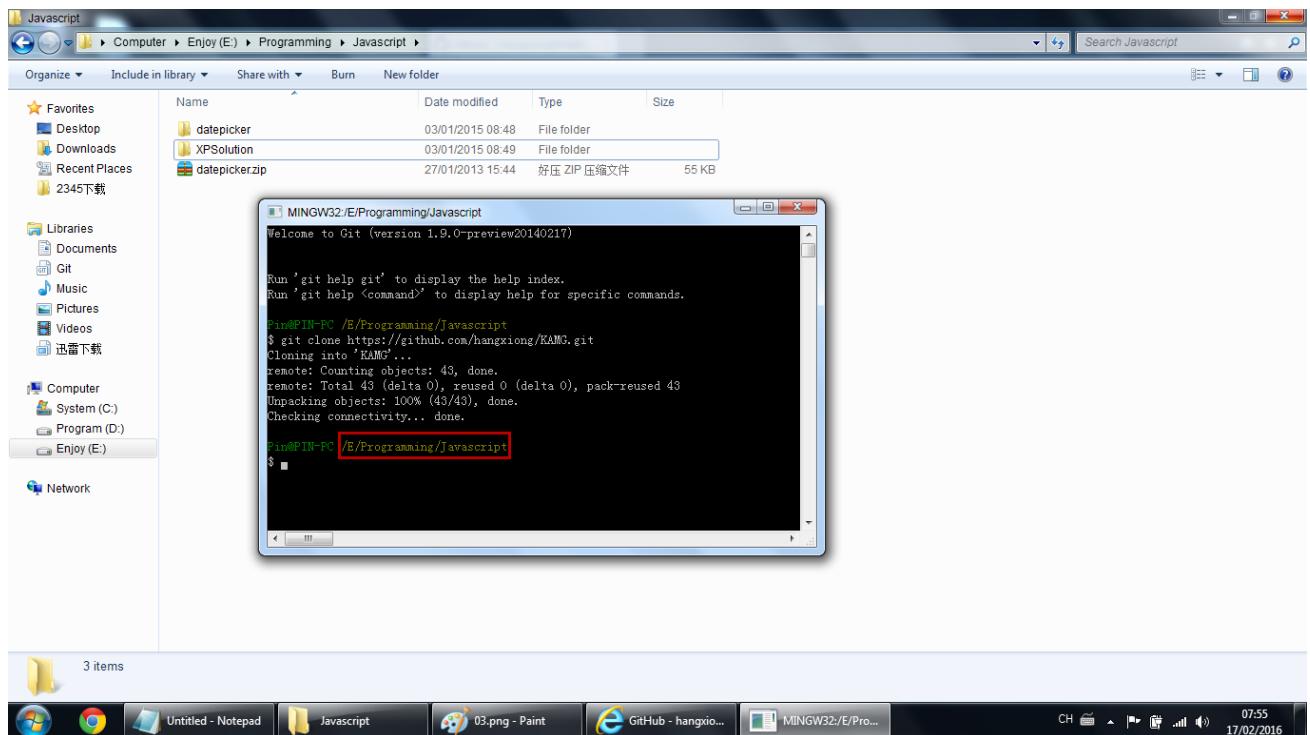


Fig. 05: Source code of KAMG in the computer.

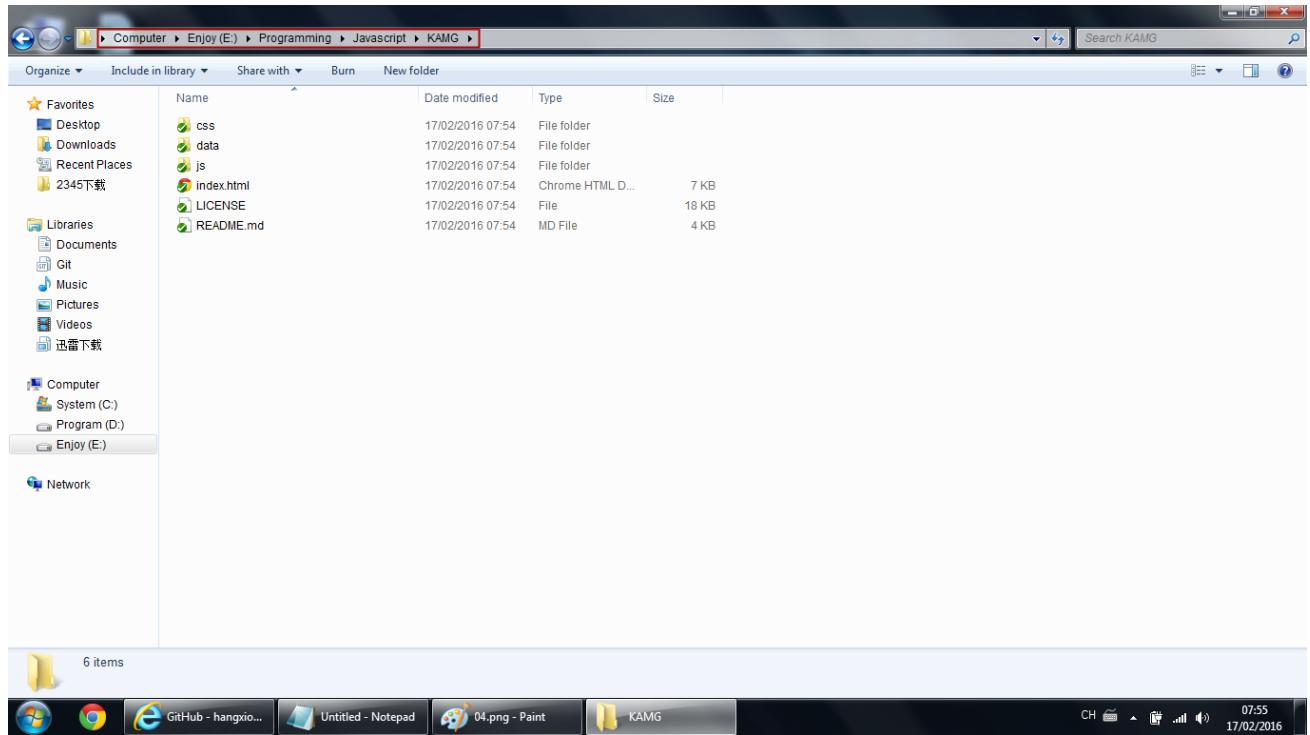


Fig.06: Open the index.html file using the Internet Explorer browser.

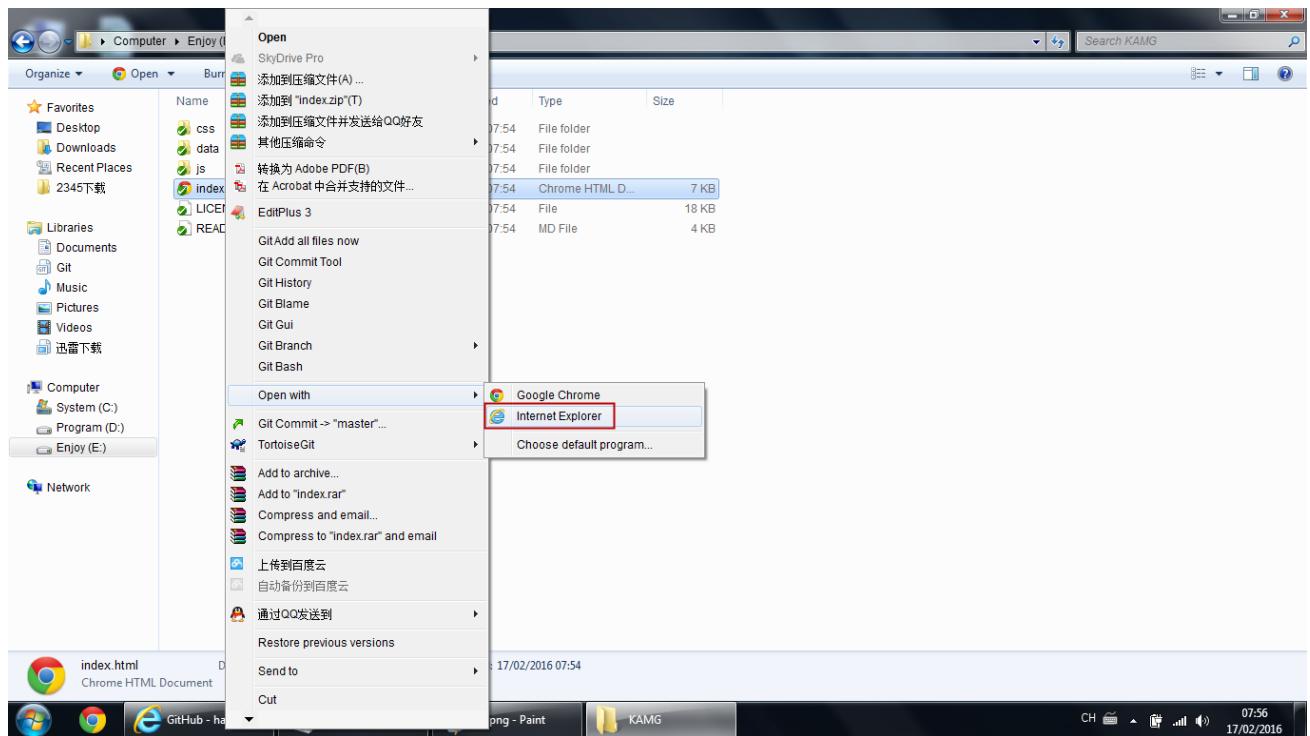


Fig. 07: A window regarding ActiveX control may pop up at the bottom of the browser. Make sure to enable ActiveX control by clicking the “Allow blocked content” button.



Fig. 08: A confirmation window pops up. Click “Yes” to confirm the previous choice.

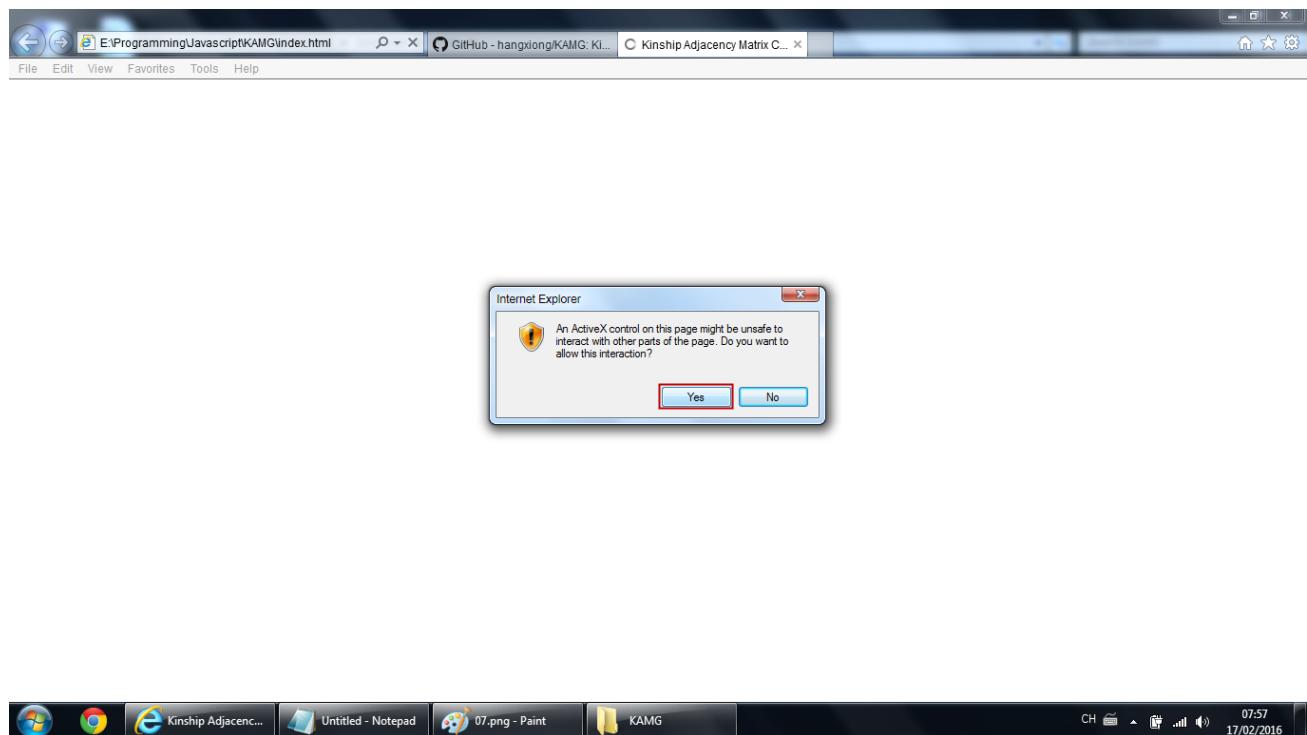


Fig. 09 – 13 show how to import the file of address.

Fig. 09: In the interface of KAMG on the brower, click “Browse...” in front of “Import Address”.

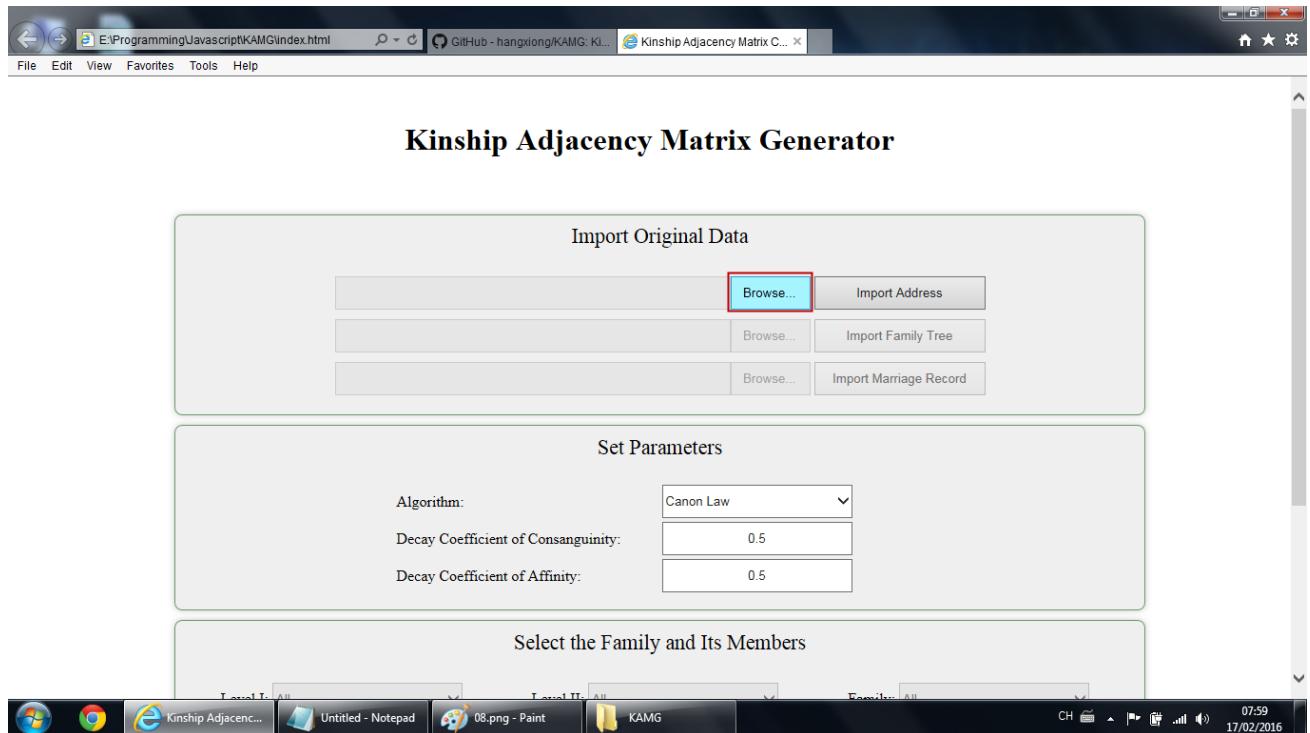


Fig. 10: In the pop-up selection window, navigate to the folder where the source code is stored and select the “address.txt” file in the data folder.

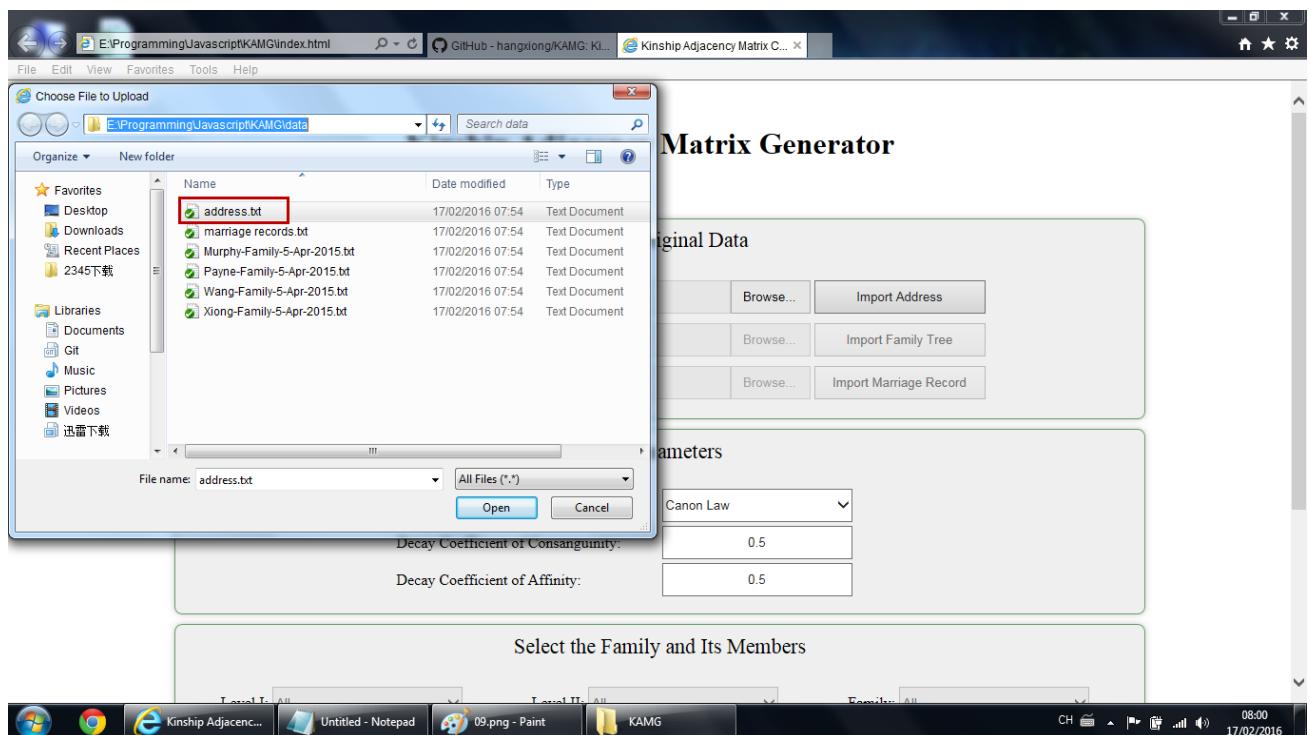


Fig. 11: Click the “Import Address” button.

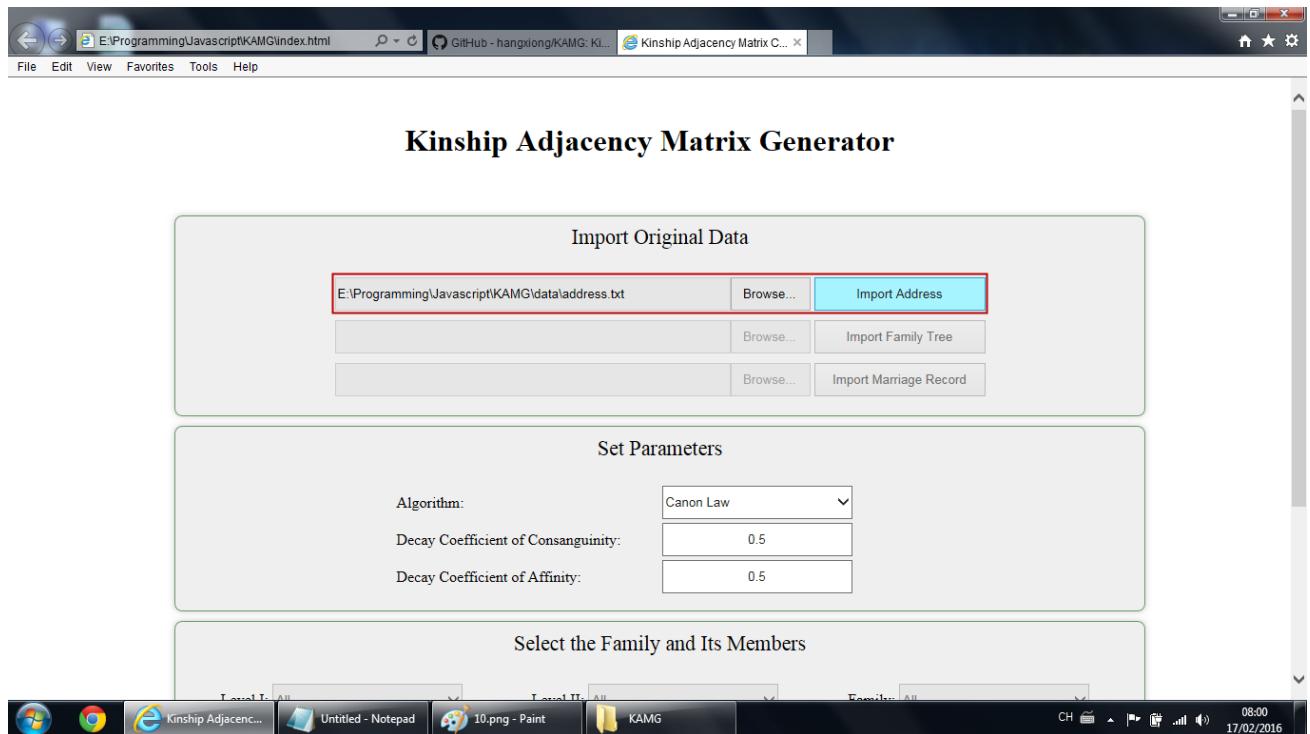


Fig. 12: A message window showing “Import Successesfully” pops up once the import process is completed.

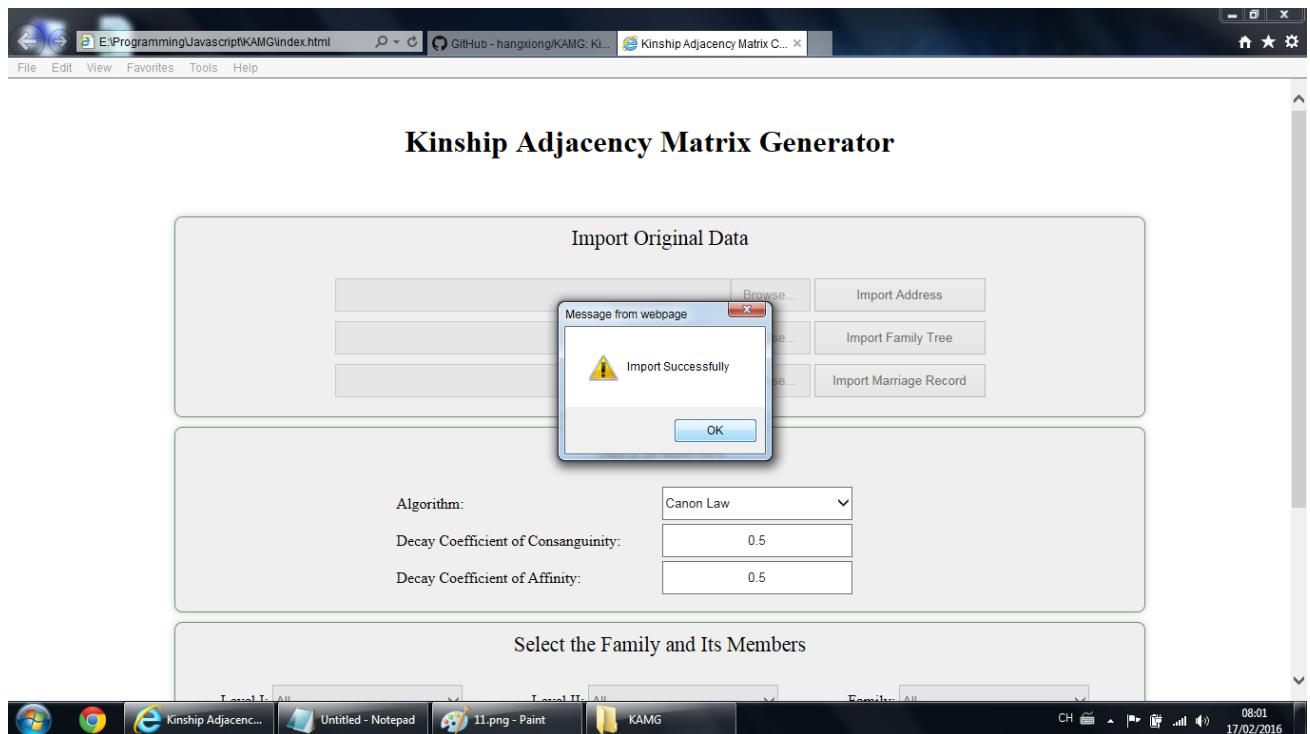


Fig. 13: The addresses will be available to choose in the drop-down menu for each of “Level I”, “Level II” and “Family”.

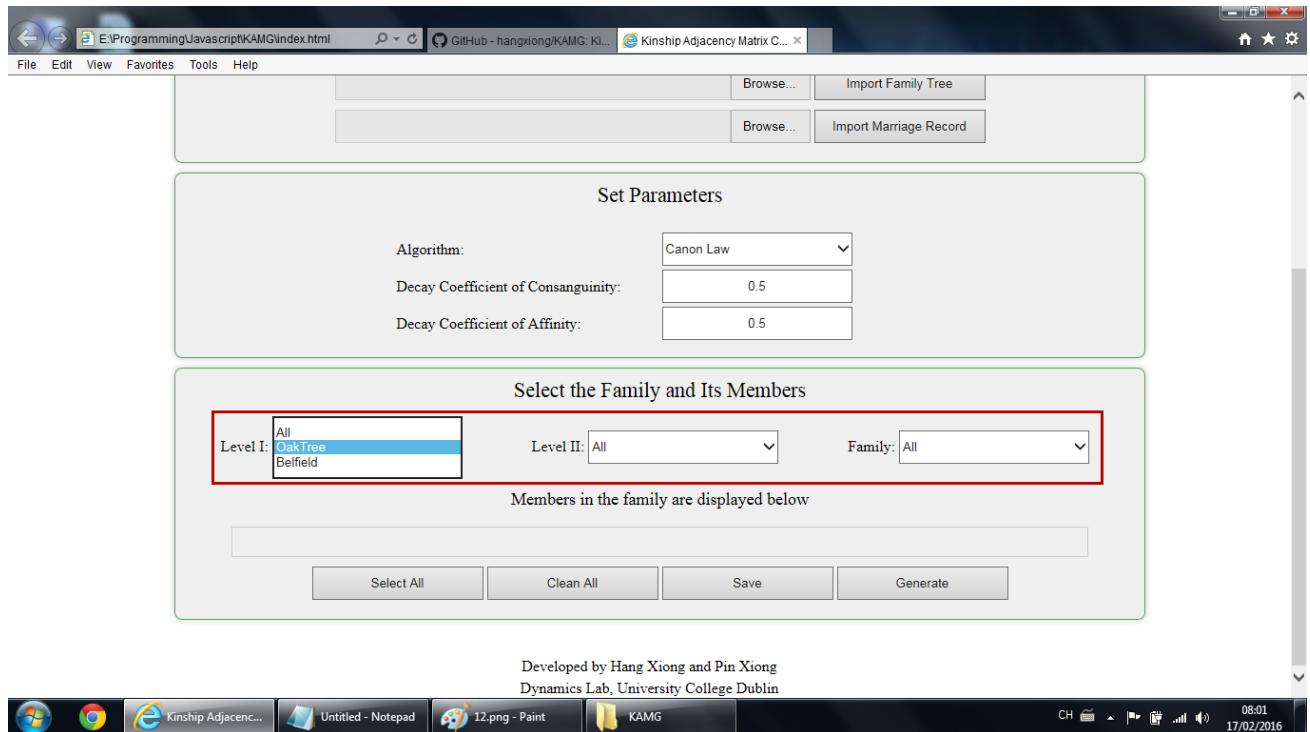


Fig. 14 – 24 show how to import family trees and save the family members. Four families (Xiong, Wang, Payne and Murphy) are shown in this instruction document.

Fig. 14: Select the address for the Xiong family.

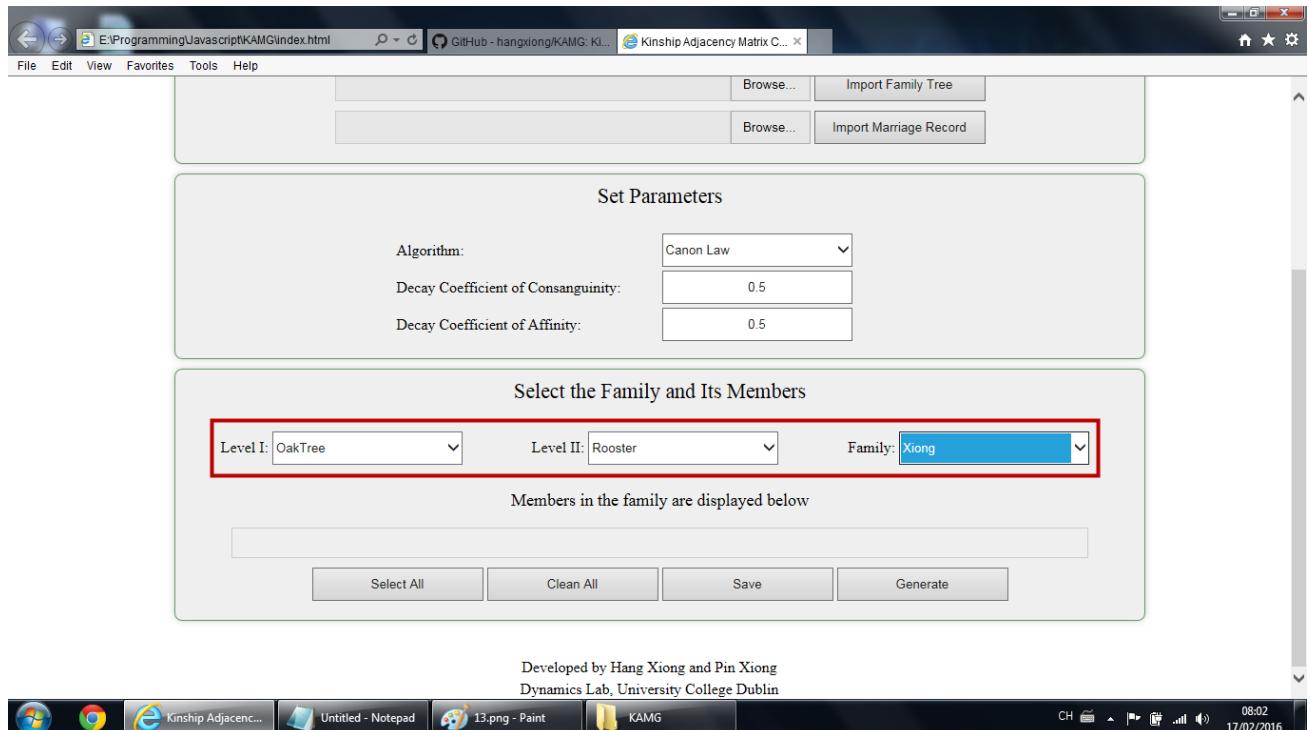


Fig. 15: Browse to the GEDCOM file of the Xiong family (GEDCOM files are stored in the data folder).

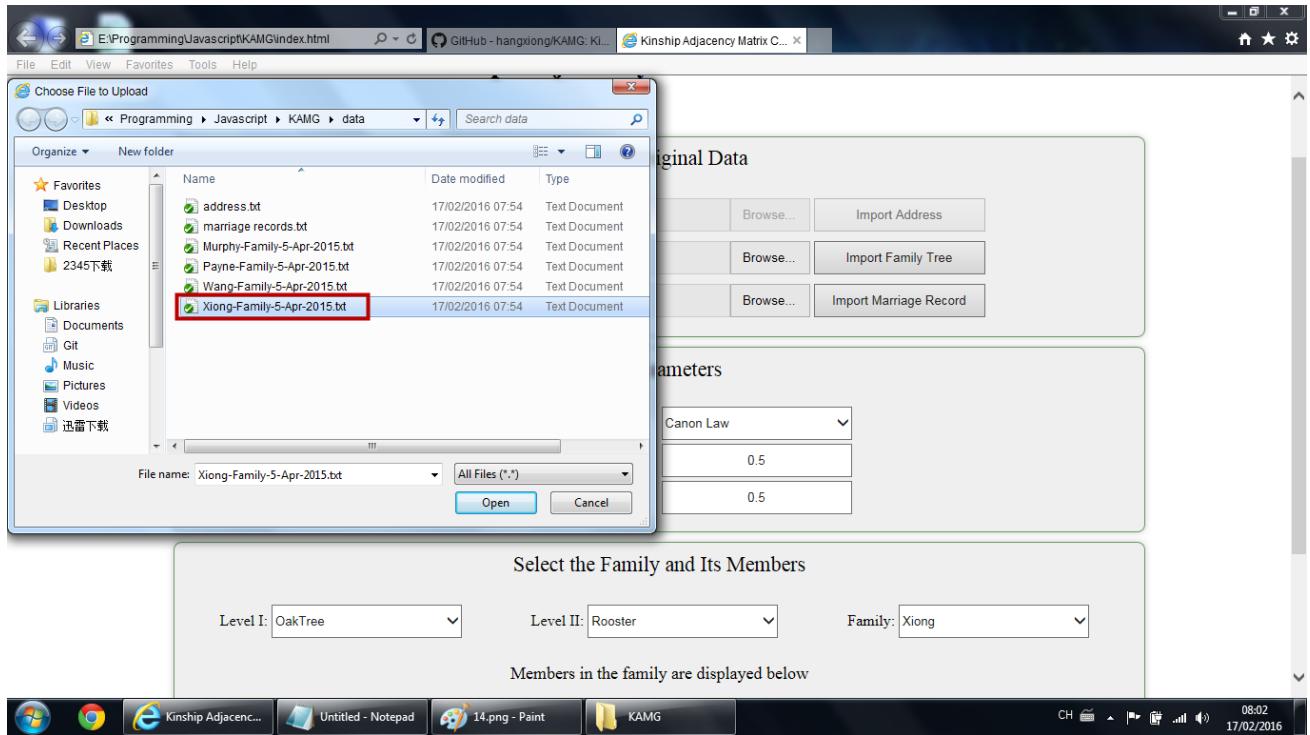


Fig. 16: Click the “Import Family Tree” button. A message window indicating successful import pops up.

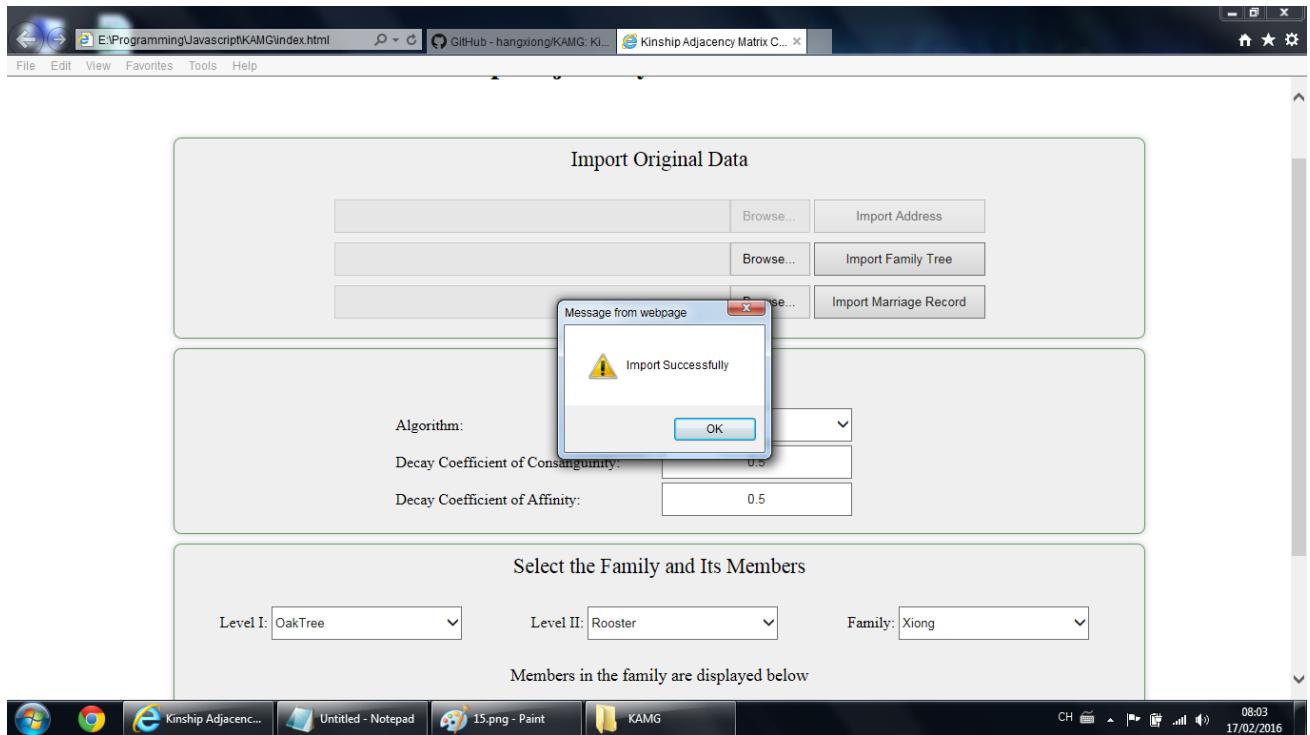


Fig. 17: Once the family tree is imported, all the members in the family will be displayed in the interface. The user can select the members for whom to generate the adjacency matrix. All members are selected by clicking the “Select All” button in this instruction document. Make sure to click the “Save” button to save the members selected for calculation.

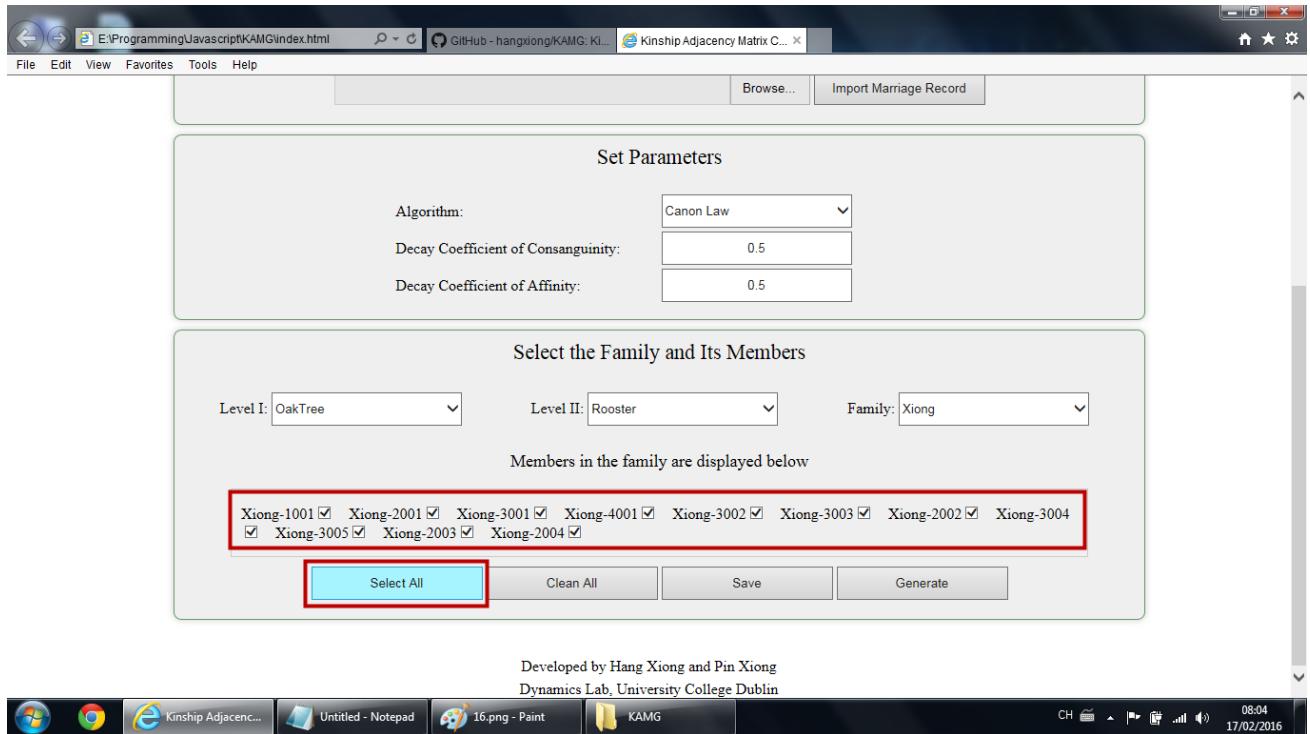


Fig. 18: Once the family tree is saved, a message window indicating successful generation pops up.

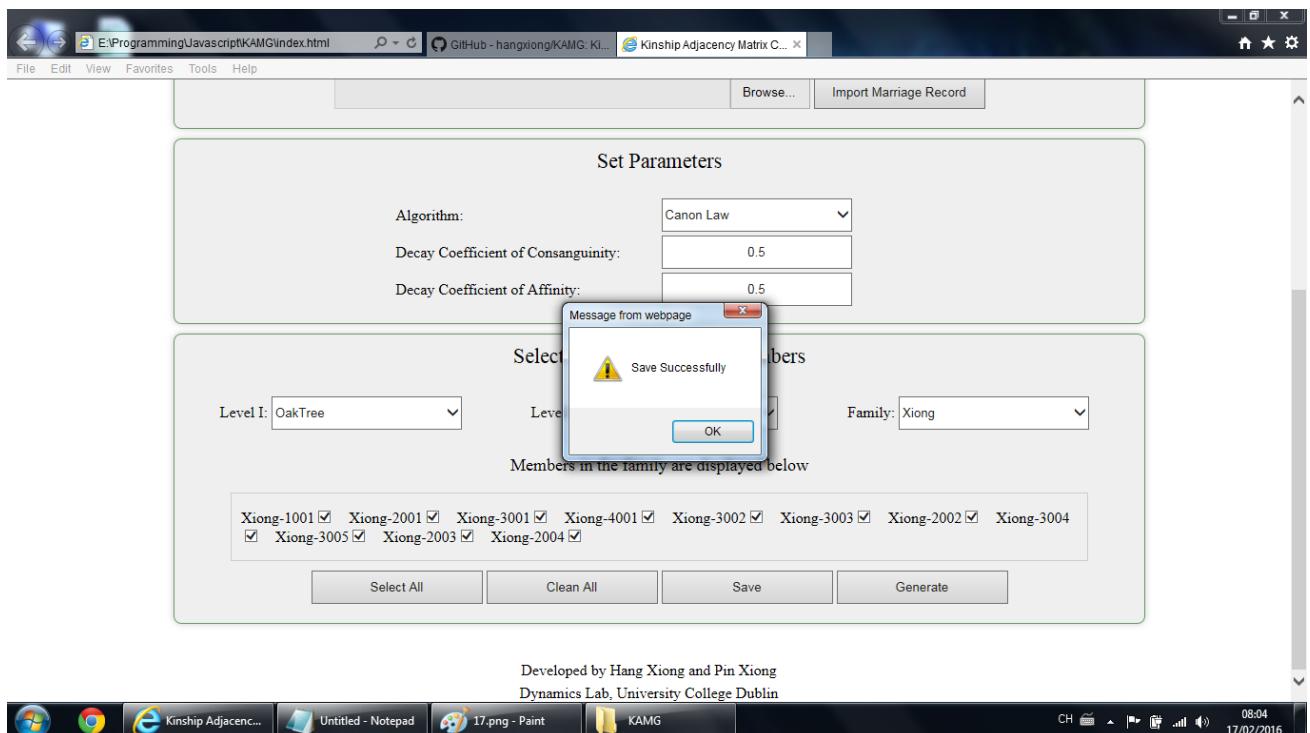


Fig. 19: Import the family tree of the Wang family

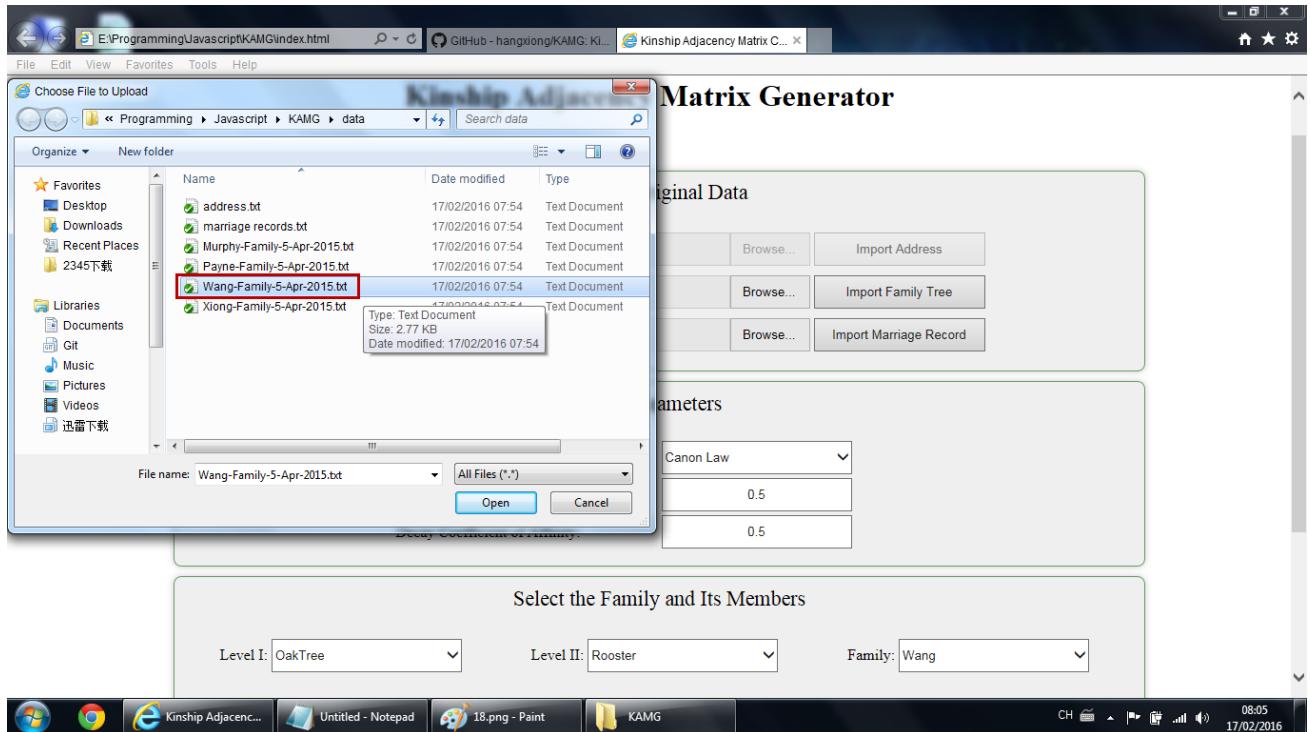


Fig. 20: Save the members of the Wang family

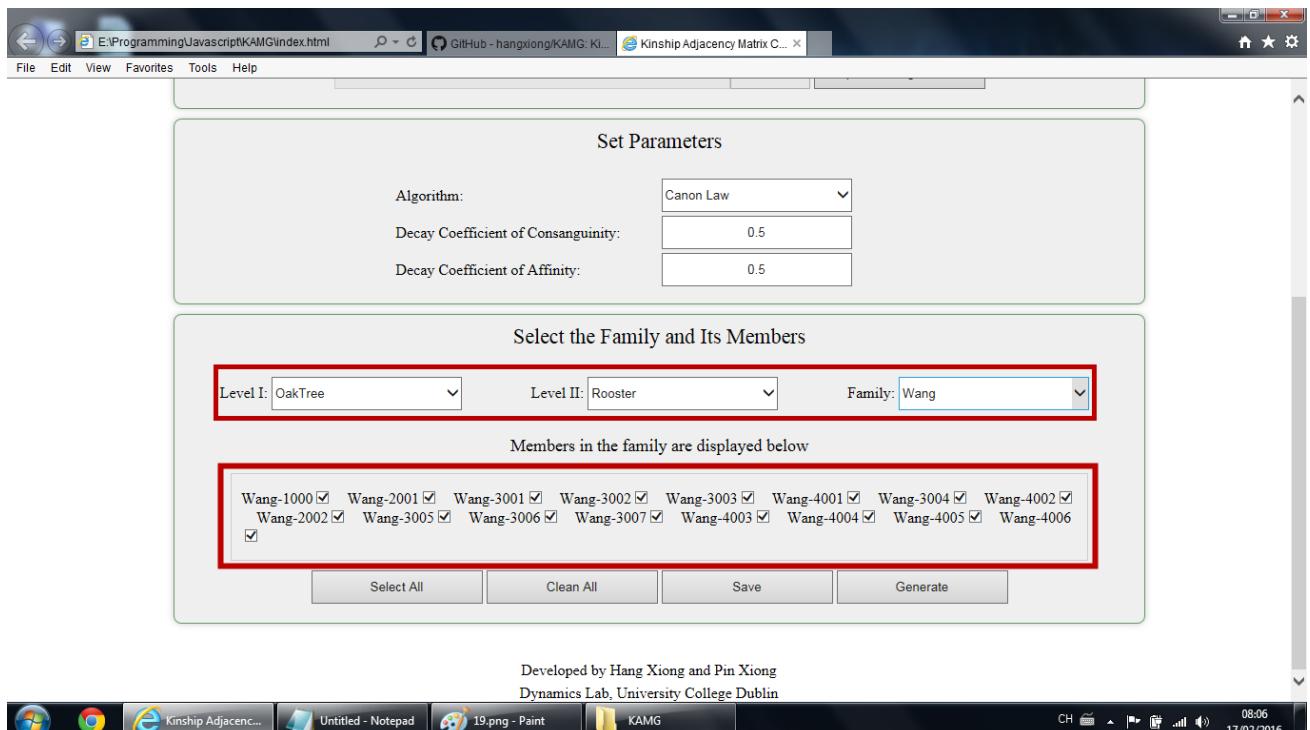


Fig. 21: Import the family tree of the Payne family.

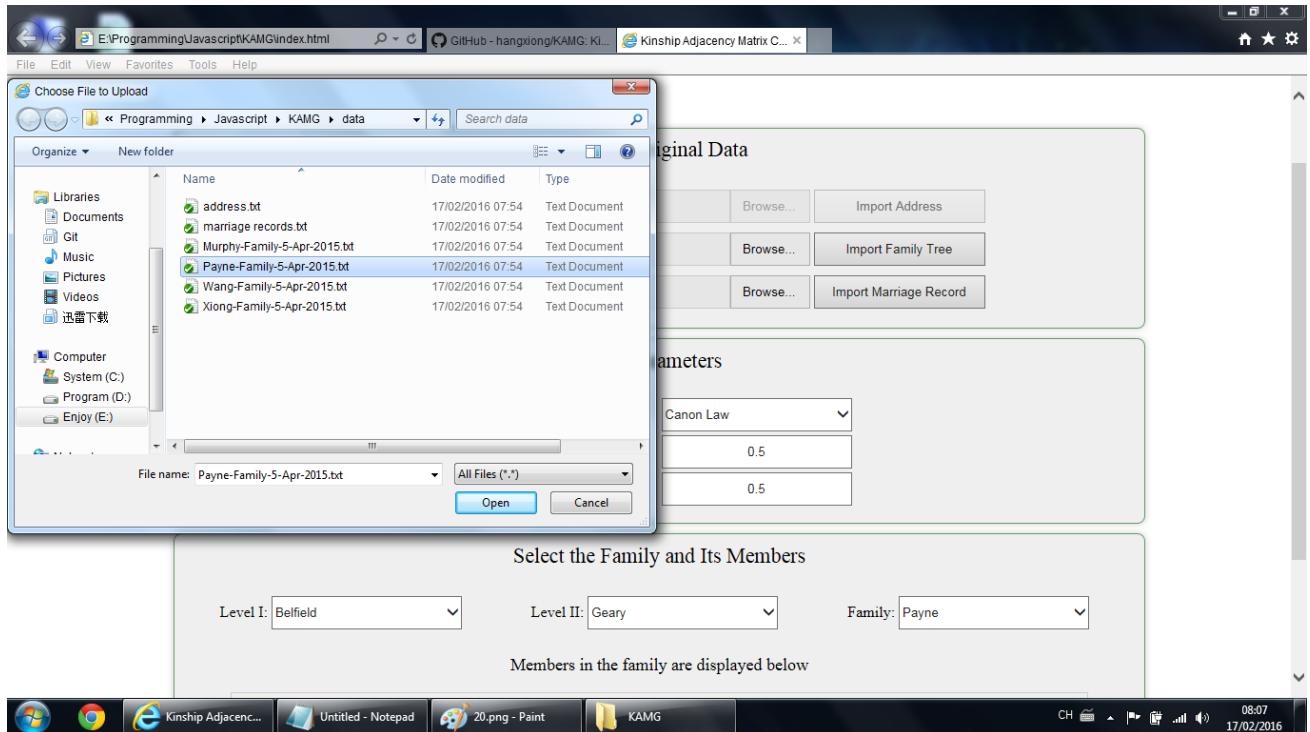


Fig. 22: Save the members of the Payne family.

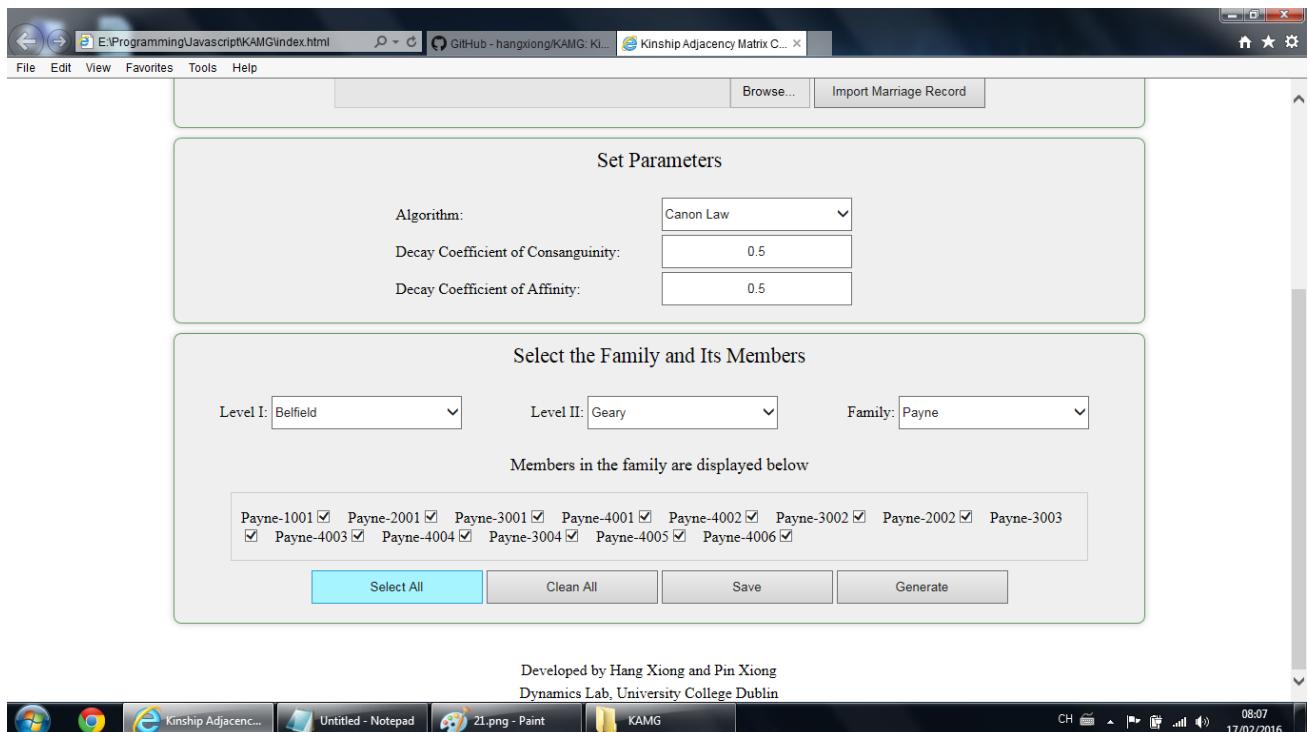


Fig. 23: Import the family tree of the Murphy family.

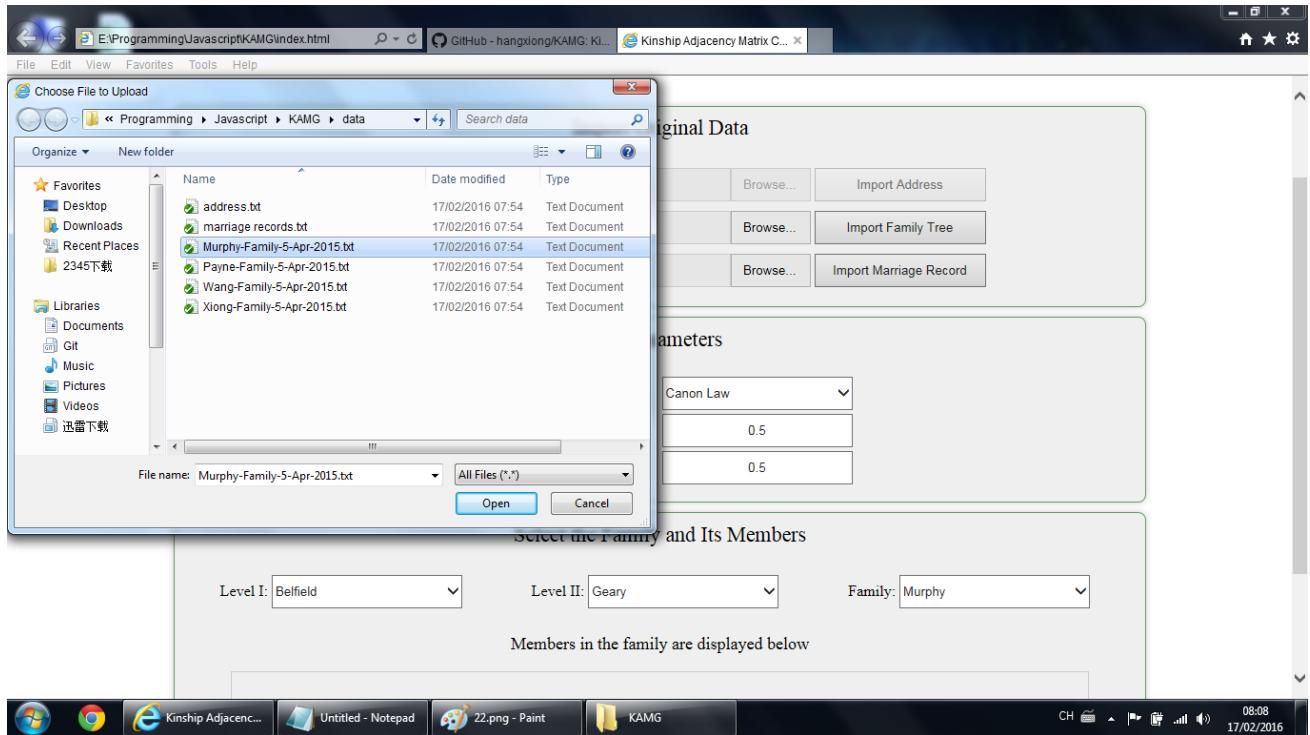


Fig. 24: Save the members of the Murphy family.

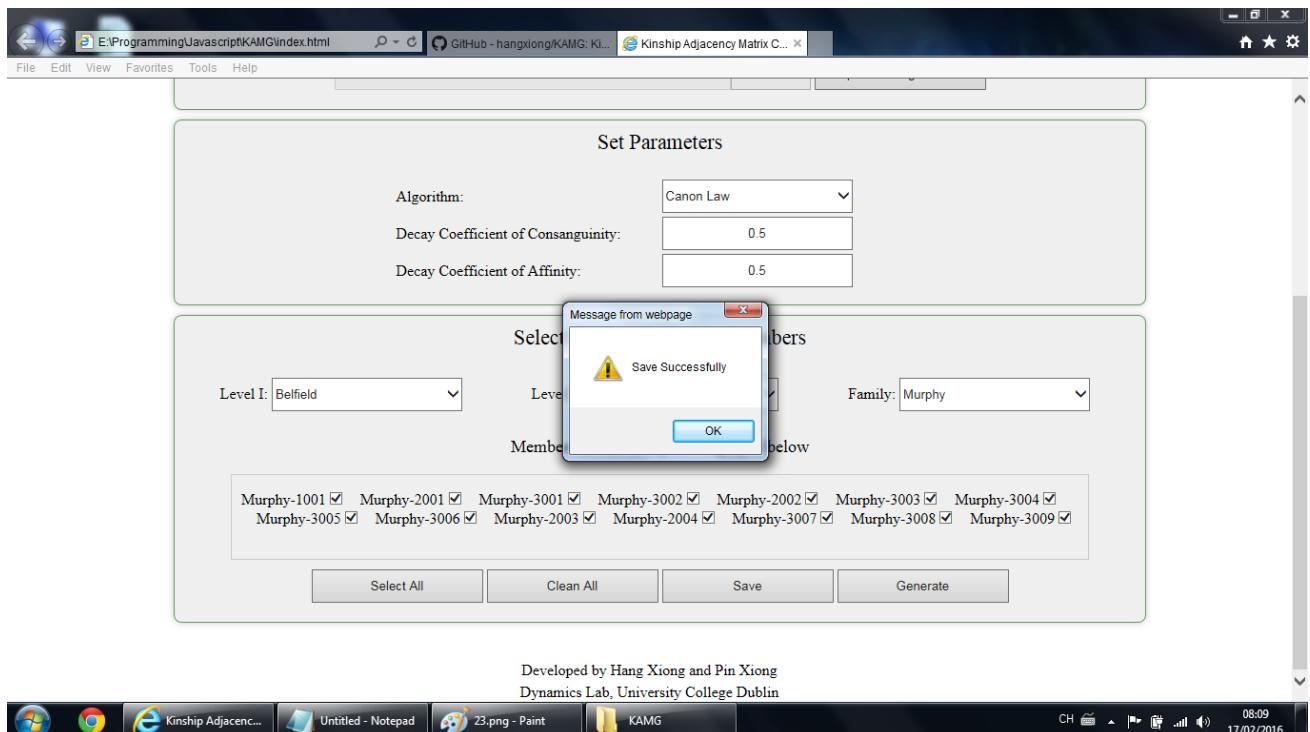


Fig: 25: Files in the data folder before the file of consanguinity adjacency matrix is generated.

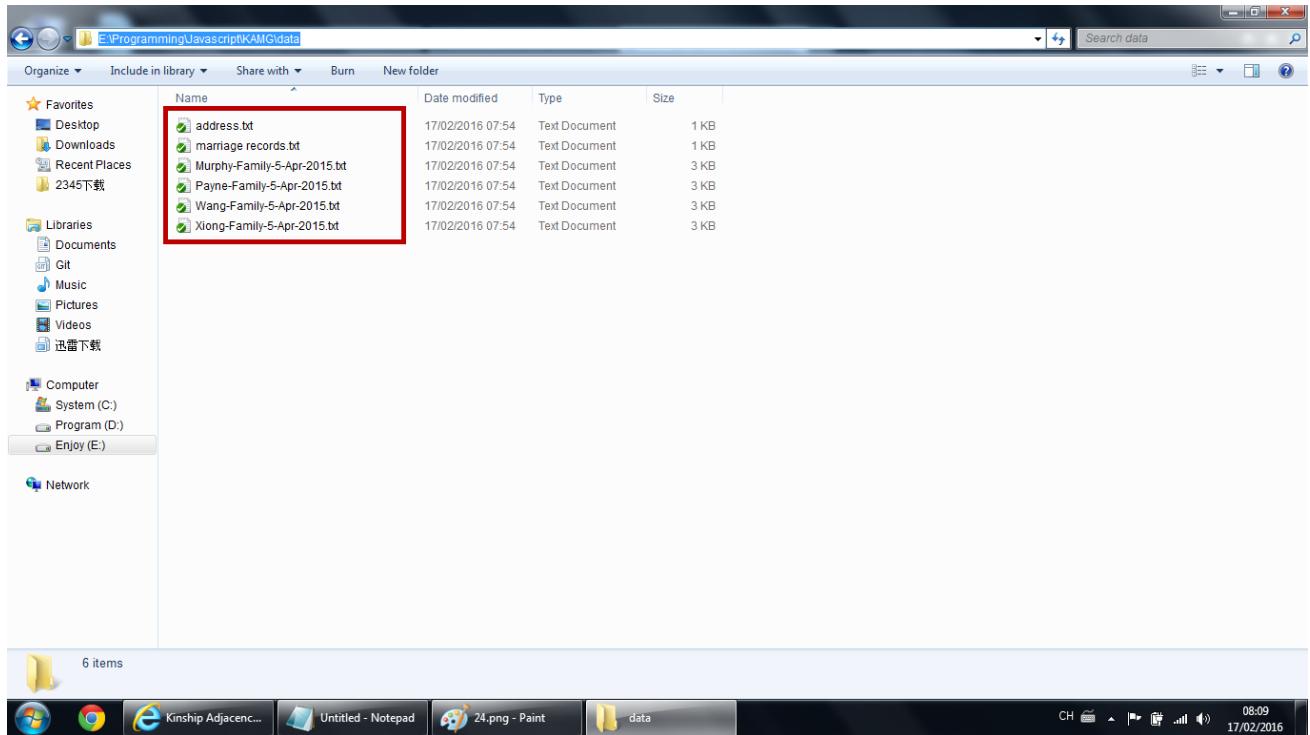


Fig. 26: Set the parameters for calculating the adjacency matrices. The defaults values are used in this instruction document. Then, click the “Generate” button. A message window showing the directory where the CSV file of consanguinity adjacency matrix generated is stored pops up.

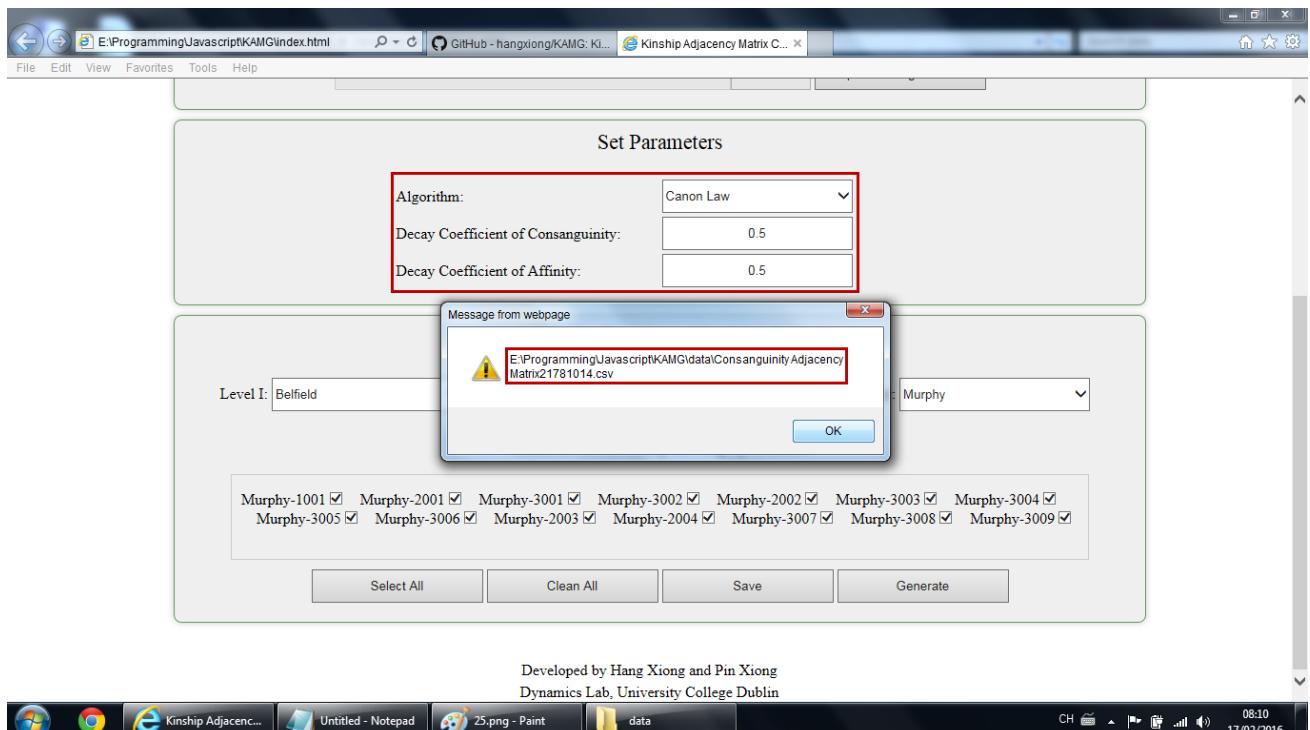


Fig. 27: A message window indicating that the results are saved pops up.

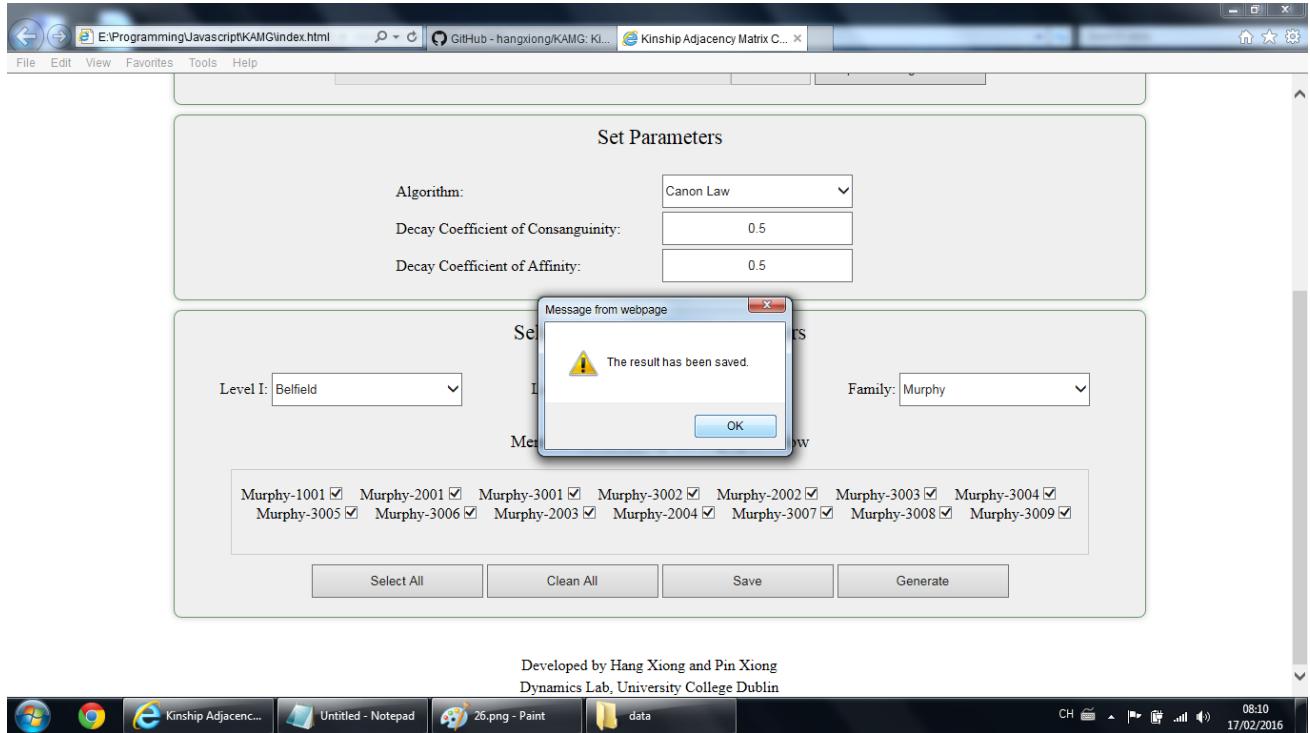


Fig. 28: Files in the data folder after the CSV file of consanguinity adjacency matrix is generated.

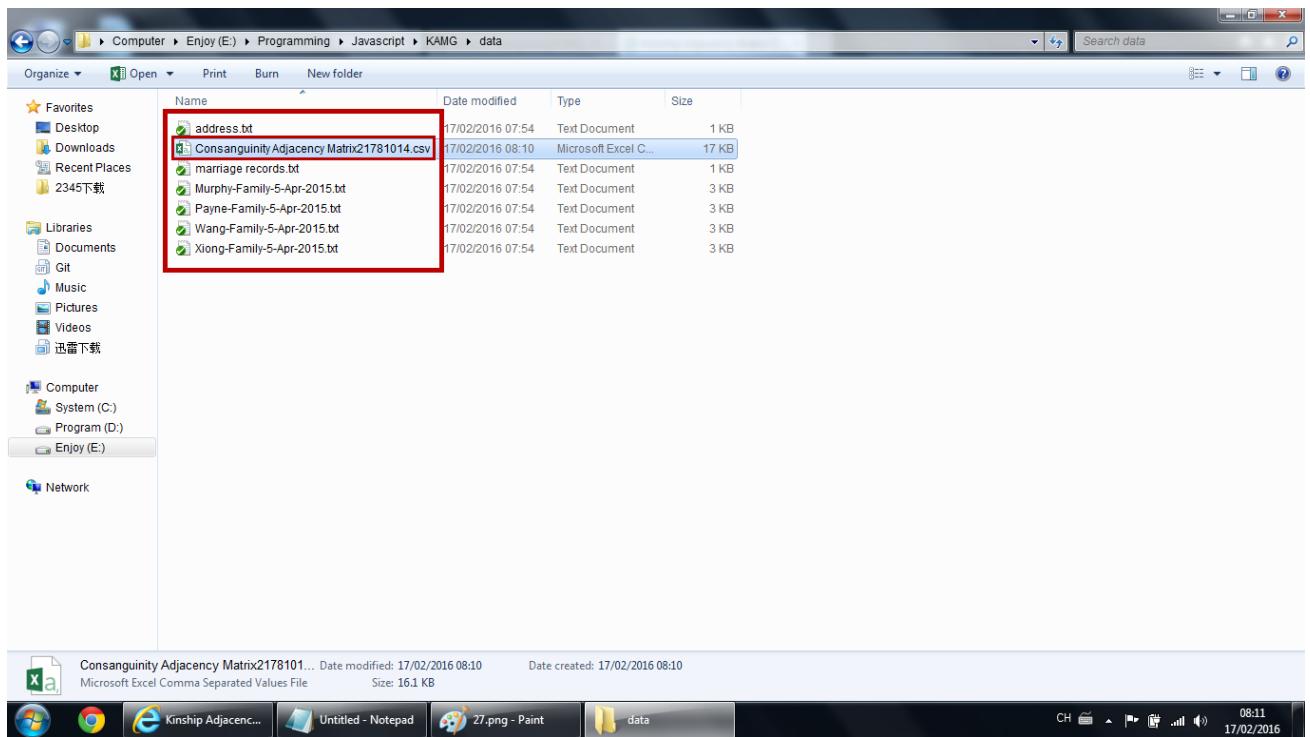


Fig. 29 – 30: The CSV file that contains all the consanguinity adjacency matrices of all the families that have been saved. The non-zero elements are the weights of blood ties in a family.

	A	B	C	D	E	G	H	I	J	K	L	M	N	O	P	Q	R
1	Xiong-100	Xiong-200	Xiong-300	Xiong-400	Xiong-300	Xiong-300	Xiong-200	Xiong-300	Xiong-200	Xiong-300	Xiong-200	Xiong-300	Xiong-200	Xiong-300	Xiong-300	Xiong-400	
2	Xiong-100	0	1	0.5	0.25	0.5	0.5	1	0.5	0.5	1	0	0	0	0	0	0
3	Xiong-200	1	0	1	0.5	1	1	1	0.5	0.5	1	1	0	0	0	0	0
4	Xiong-300	0.5	1	0	1	1	1	0.5	0.5	0.5	0.5	0.5	0	0	0	0	0
5	Xiong-400	0.25	0.5	1	0	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0	0	0	0	0
6	Xiong-300	0.5	1	1	0.5	0	1	0.5	0.5	0.5	0.5	0.5	0	0	0	0	0
7	Xiong-300	0.5	1	1	0.5	1	0	0.5	0.5	0.5	0.5	0.5	0	0	0	0	0
8	Xiong-200	1	1	0.5	0.25	0.5	0.5	0	1	1	1	1	0	0	0	0	0
9	Xions-300	0.5	0.5	0.25	0.5	0.5	1	0	1	0.5	0.5	0	0	0	0	0	0
10	Xions-300	0.5	0.5	0.25	0.5	0.5	0.5	1	1	0	0.5	0.5	0	0	0	0	0
11	Xions-200	1	1	0.5	0.25	0.5	0.5	1	0.5	0.5	0	1	0	0	0	0	0
12	Xions-200	1	1	0.5	0.25	0.5	0.5	1	0.5	0.5	1	0	0	0	0	0	0
13	Wang-1000	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	0.5	0.25
14	Wang-2001	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0.5
15	Wang-3001	0	0	0	0	0	0	0	0	0	0	0	0.5	1	0	1	1
16	Wang-3002	0	0	0	0	0	0	0	0	0	0	0	0.5	1	1	0	1
17	Wang-3003	0	0	0	0	0	0	0	0	0	0	0	0.5	1	1	1	0.5
18	Wang-4001	0	0	0	0	0	0	0	0	0	0	0	0.25	0.5	0.5	0.5	1
19	Wang-3004	0	0	0	0	0	0	0	0	0	0	0	0.5	1	1	1	0.5
20	Wang-4002	0	0	0	0	0	0	0	0	0	0	0	0.25	0.5	0.5	0.5	0.5
21	Wang-2002	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.5	0.25
22	Wang-3005	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0.5	0.25
23	Wang-3006	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0.5	0.25
24	Wang-3007	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0.5	0.25
25	Wang-4003	0	0	0	0	0	0	0	0	0	0	0	0.25	0.25	0.25	0.25	0.25
26	Wang-4004	0	0	0	0	0	0	0	0	0	0	0	0.25	0.25	0.25	0.25	0.25

	AC	AD	AE	AF	AG	AH	AI	AT	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
30	1	0	1	0.5	0.5	1	1	0.5	0.25	0.25	0.5	0.25	0.25	0	0	0	0	0
31	0.5	1	0	1	1	1	0.5	0.5	0.25	0.25	0.5	0.25	0.25	0	0	0	0	0
32	0.25	0.5	1	0	1	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0	0	0	0	0
33	0.25	0.5	1	1	0	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0	0	0	0	0
34	0.5	1	1	0.5	0.5	0	0.5	0.5	0.25	0.25	0.5	0.25	0.25	0	0	0	0	0
35	1	1	0.5	0.25	0.25	0.5	0	1	0.5	0.5	1	0.5	0.5	0	0	0	0	0
36	0.5	0.5	0.5	0.25	0.25	0.5	1	0	1	1	1	0.5	0.5	0	0	0	0	0
37	0.25	0.25	0.25	0.25	0.25	0.5	1	0	1	0.5	0.5	0.5	0.5	0	0	0	0	0
38	0.25	0.25	0.25	0.25	0.25	0.5	1	1	0	0.5	0.5	0.5	0.5	0	0	0	0	0
39	0.5	0.5	0.5	0.25	0.25	0.5	1	1	0.5	0.5	0	1	1	0	0	0	0	0
40	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.5	0.5	0.5	1	0	0	0	0	0	0	0
41	0.25	0.25	0.25	0.25	0.25	0.5	0.5	0.5	0.5	1	1	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1
43	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1	0	1	0.5
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1	1	0	0.5
46	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.5	0
47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	1
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	1
49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	1
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0.5	1
51	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.5	1
52	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.5	1
53	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0.5	0.5
54	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0.5	0.5
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5	0.5	0.5	0.5

Fig. 31 – 31 show how the file of marriage record is imported.

Fig. 31: Browse to the “marriage records.txt” file in the data folder.

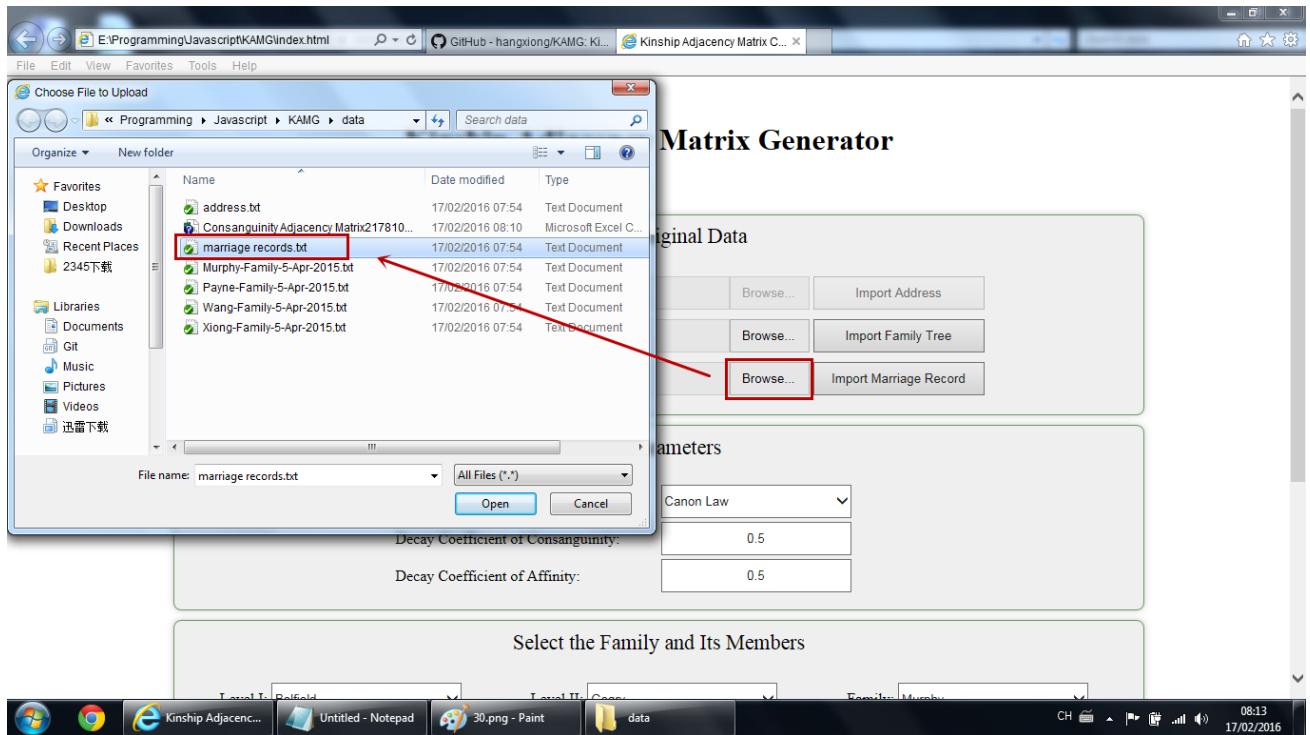


Fig. 32: Click the “Import Marriage Record” button.

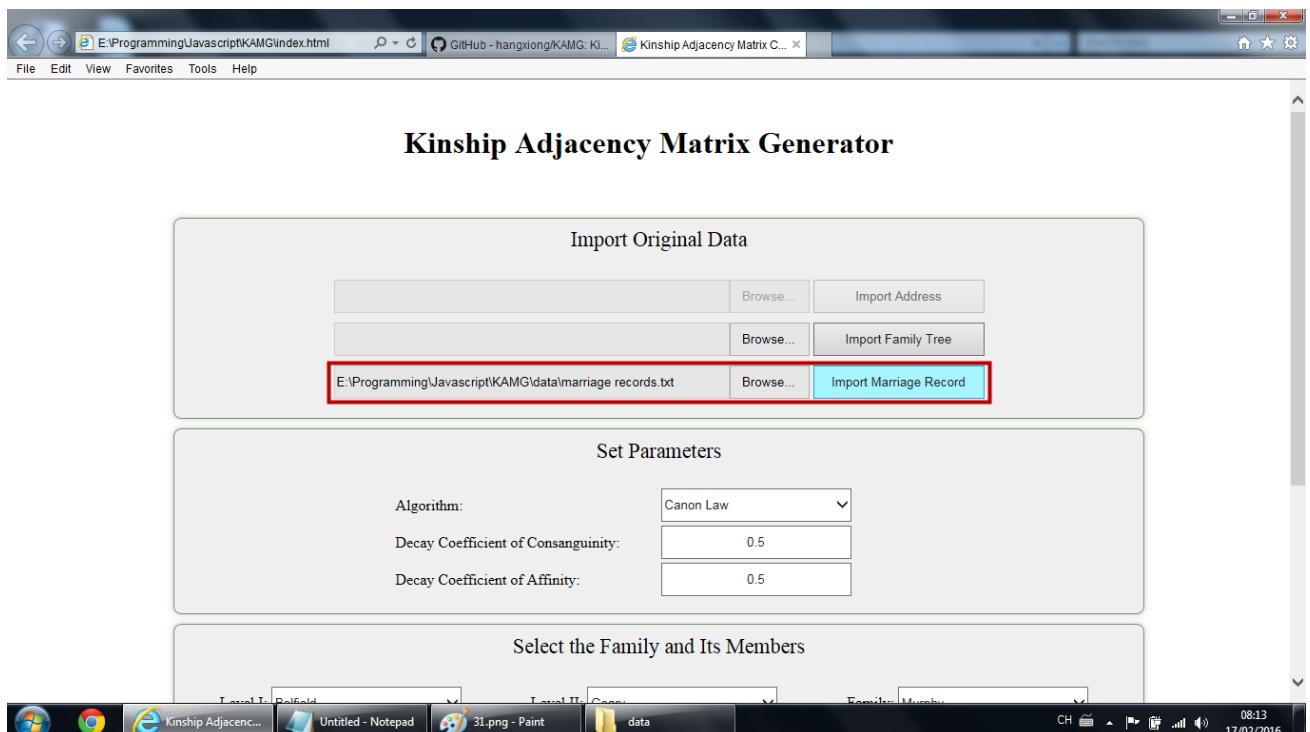


Fig. 33: A message window indicating that the marriage record is imported successfully pops up.

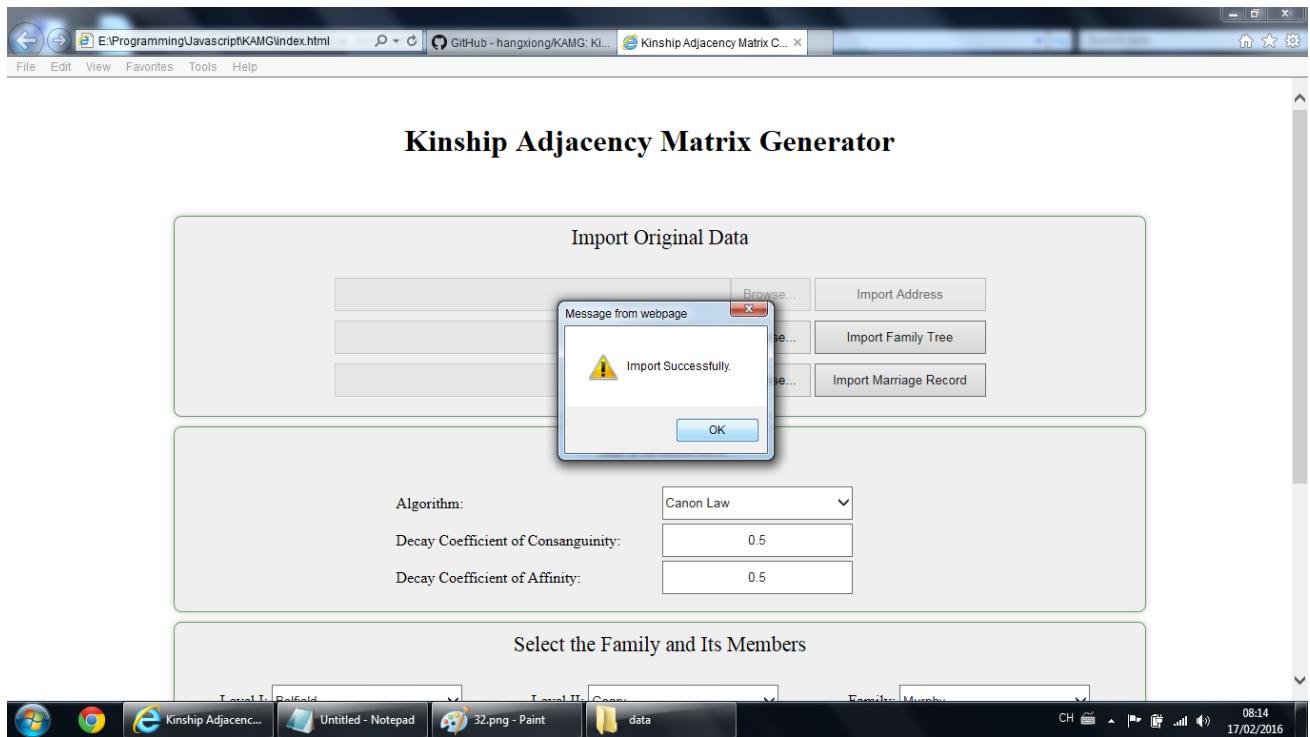


Fig. 34: Click the “Generate” button to generate the kinship adjacency matrix for all the families.

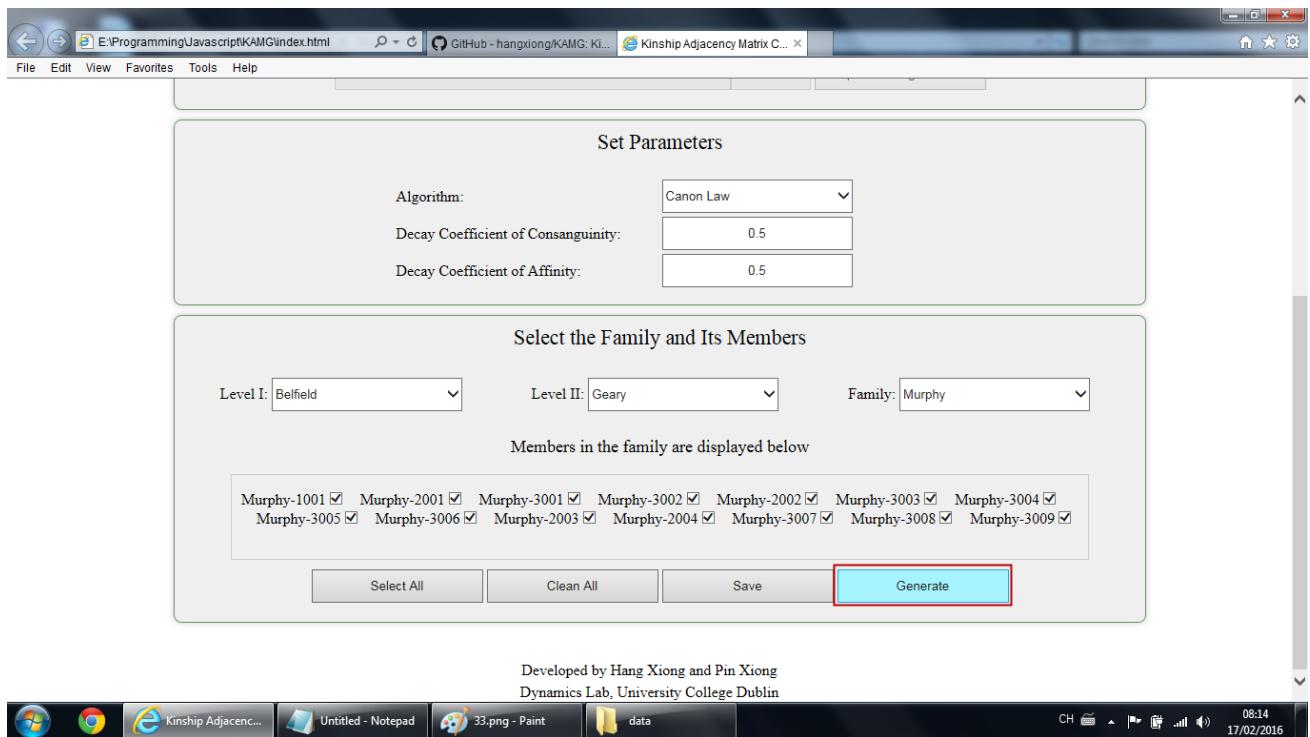


Fig. 35: A message window showing the directory where the CSV file of kinship adjacency matrix is stored pops up.

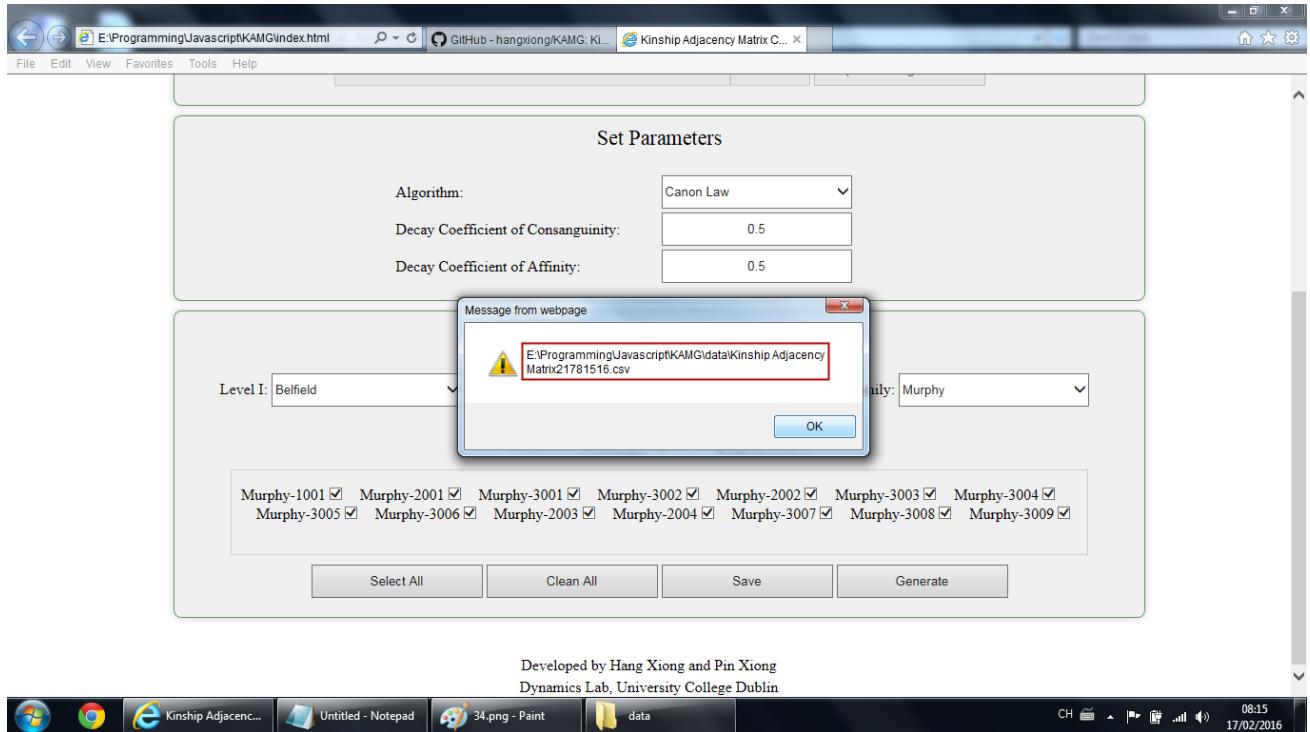


Fig. 36: A message window indicating that the results are saved pops up.

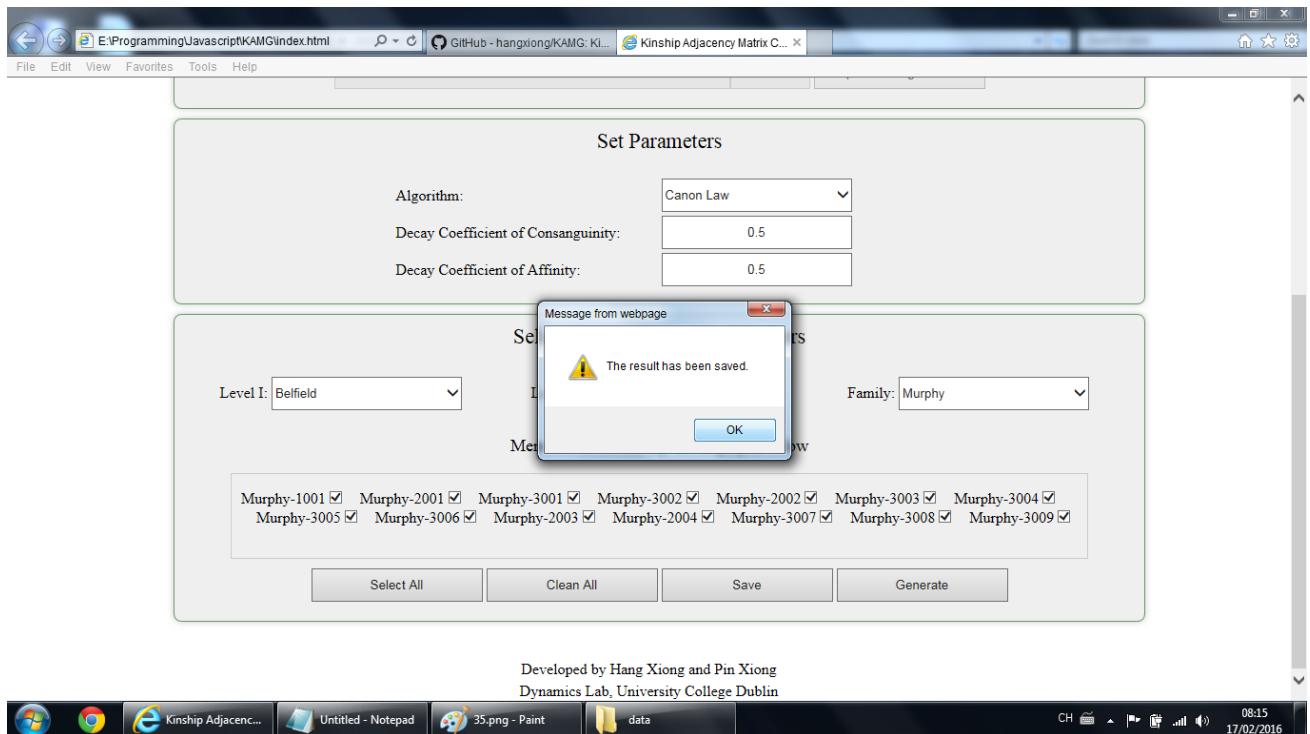


Fig. 37: Files in the data folder after the CSV file of kinship adjacency matrix is generated.

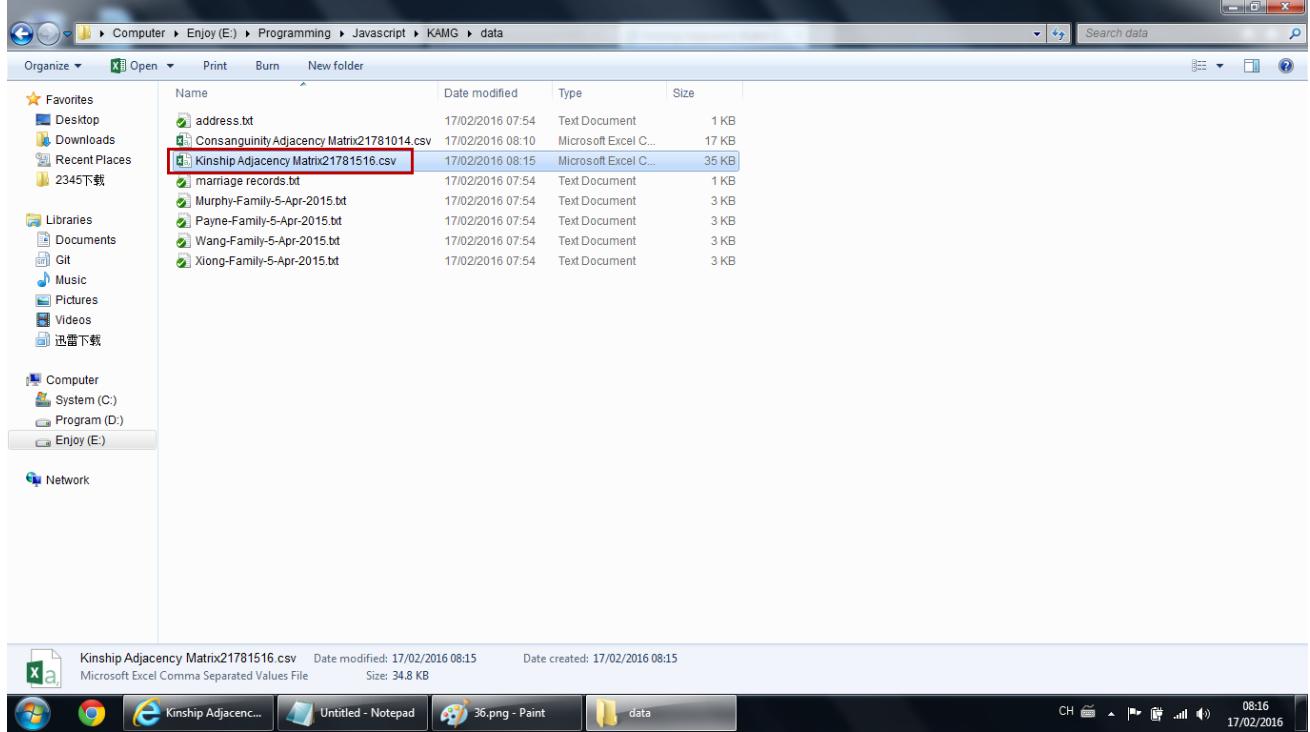


Fig. 38 – 39: The CSV file that contains the kinship adjacency matrix of all the families.

The top part of the image shows a Microsoft Excel window with the title 'Kinship Adjacency Matrix21781516.csv - Excel'. The ribbon tabs are visible at the top. The main area displays a large matrix of values. The first few rows and columns are labeled with family names like 'Xiong-100', 'Xiong-200', etc. The data consists of numerical values ranging from 0 to 1, indicating the degree of kinship between pairs of families. A large portion of the matrix, starting from row 2 and column 2, is highlighted with a red box. The bottom part of the image shows another Microsoft Excel window with the same title and data, mirroring the top window.

