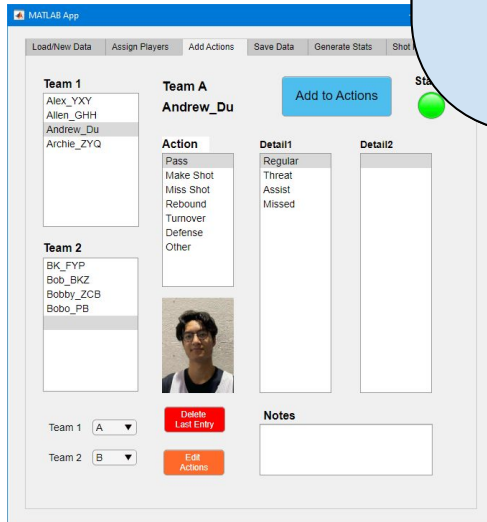
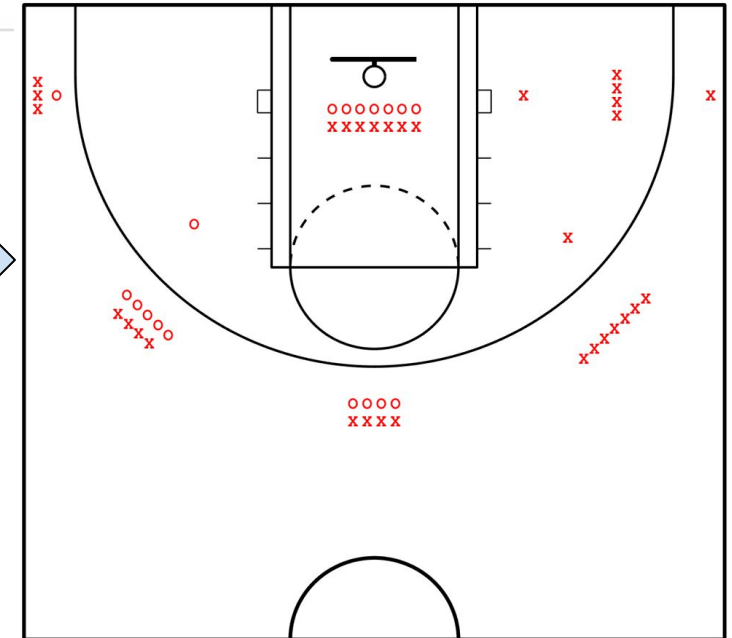
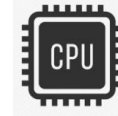
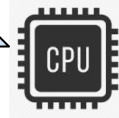


# Overview: From Video to Stats

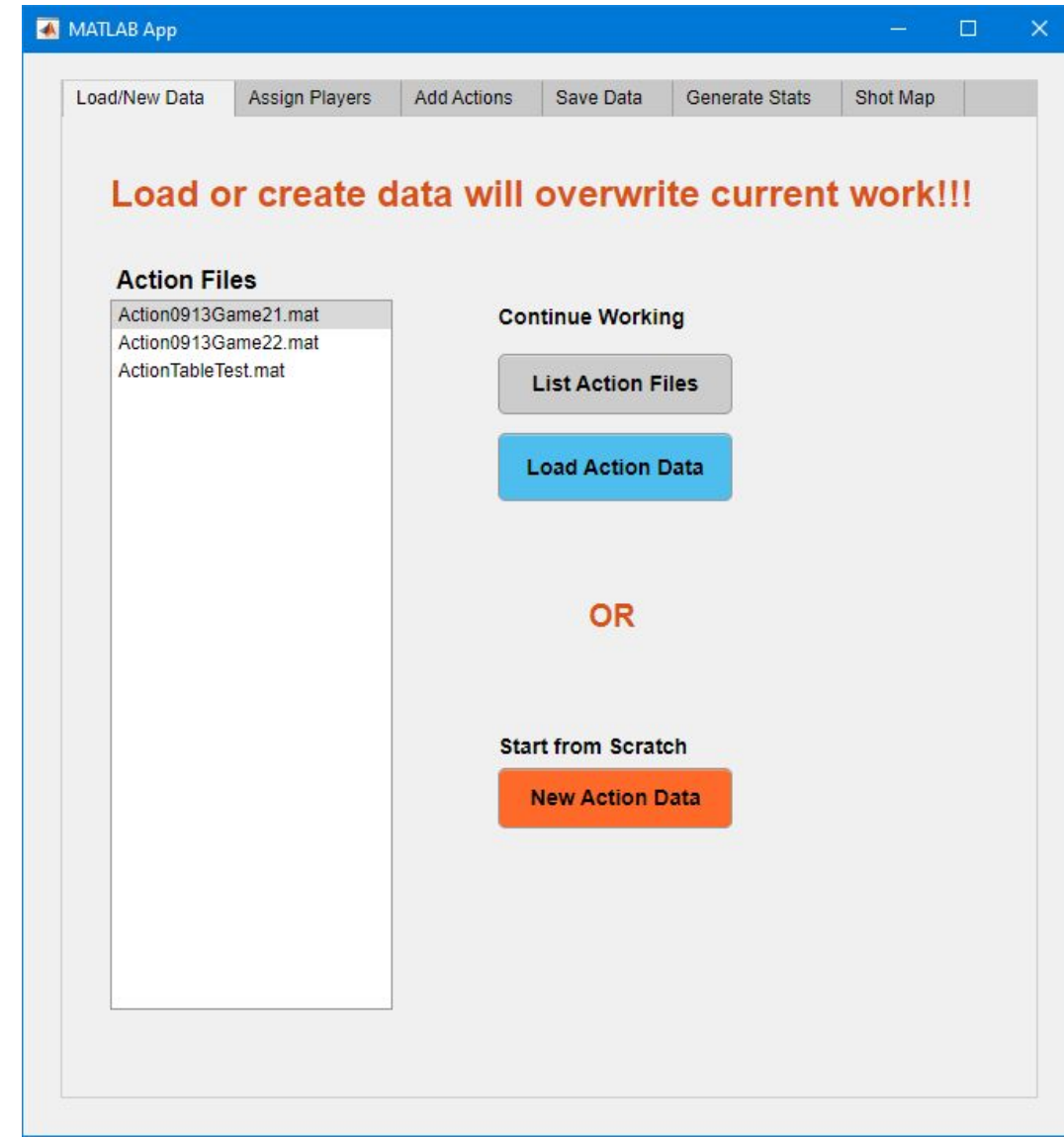


	A	B	C	D	E	F	G	H	I	J
1	Player	2pt	3pt	Layup	FT	Regular Pass	Threat Pass	Missed Pass	shot allowed	shot cont
2	Alex_YXY	1/2	0/0	0/0	0/0	8	0	1	0	
3	Bob_BKZ	0/0	0/0	0/0	0/0	3	1	1	0	
4	CUBA_LCY	0/1	0/0	1/2	0/0	4	2	1	0	
5	Chione_XCY	0/0	1/1	0/1	0/1	4	1	0	0	
6	Jim_XQH	0/0	2/2	0/0	0/0	1	0	0	0	
7	Ma_LY	0/0	0/1	0/1	0/0	7	0	0	0	
8	Michael_CBC	0/0	0/0	0/0	0/0	2	0	0	0	
9	Neo_LWQ	0/0	1/1	1/1	0/0	2	1	0	0	
10	Nicole_LXR	0/1	0/1	0/1	0/0	5	0	0	0	
11	Tang_YF	0/0	0/0	0/0	0/0					



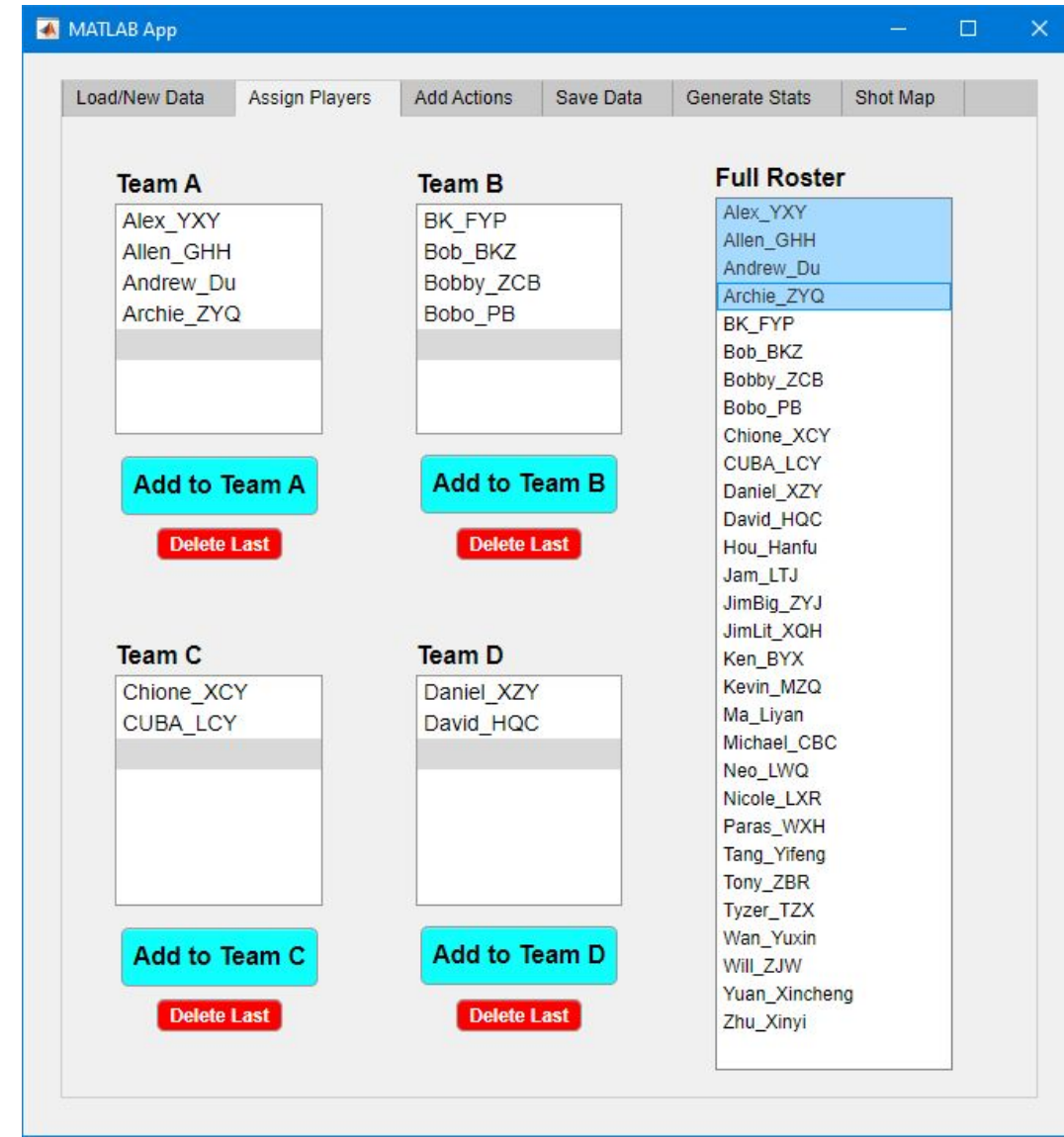
# Tab 1: initiate GameActions variable

- Option 1: load from existing data file and continue working
  - [List Action Files] will show all data files that starts with “Action...”
  - [Load Action Data] will load the selected data file into workspace
- Option 2: create an empty variable
  - [New Action Data] will create an empty data table variable in workspace



# Tab 2: assign players to teams

- Select players from “Full Roster”
  - may multiselect with ctrl or shift
- [Add to Team X] will add selected names to Team X
- [Delete Last] will delete the last added player from Team X



# Tab 3: watch video and add game actions

- Select playing teams A-D
  - Names will be pulled from Tab 2
- Select the player in action
  - Team, player name & picture will change based on selection
- Select action type and detail
- [Add to Action] will enter data
  - double check Team and Player name display
  - after “miss shot”, auto select “rebound”
  - after “make shot”, auto switch to other team
  - after “pass-assist”, auto select “make shot”
  - after “turnover”, auto switch to other team
  - [Delete Last Entry] will do what it says
  - [Edit Actions] will open the action table
- Status light will flash after [Add to Actions]

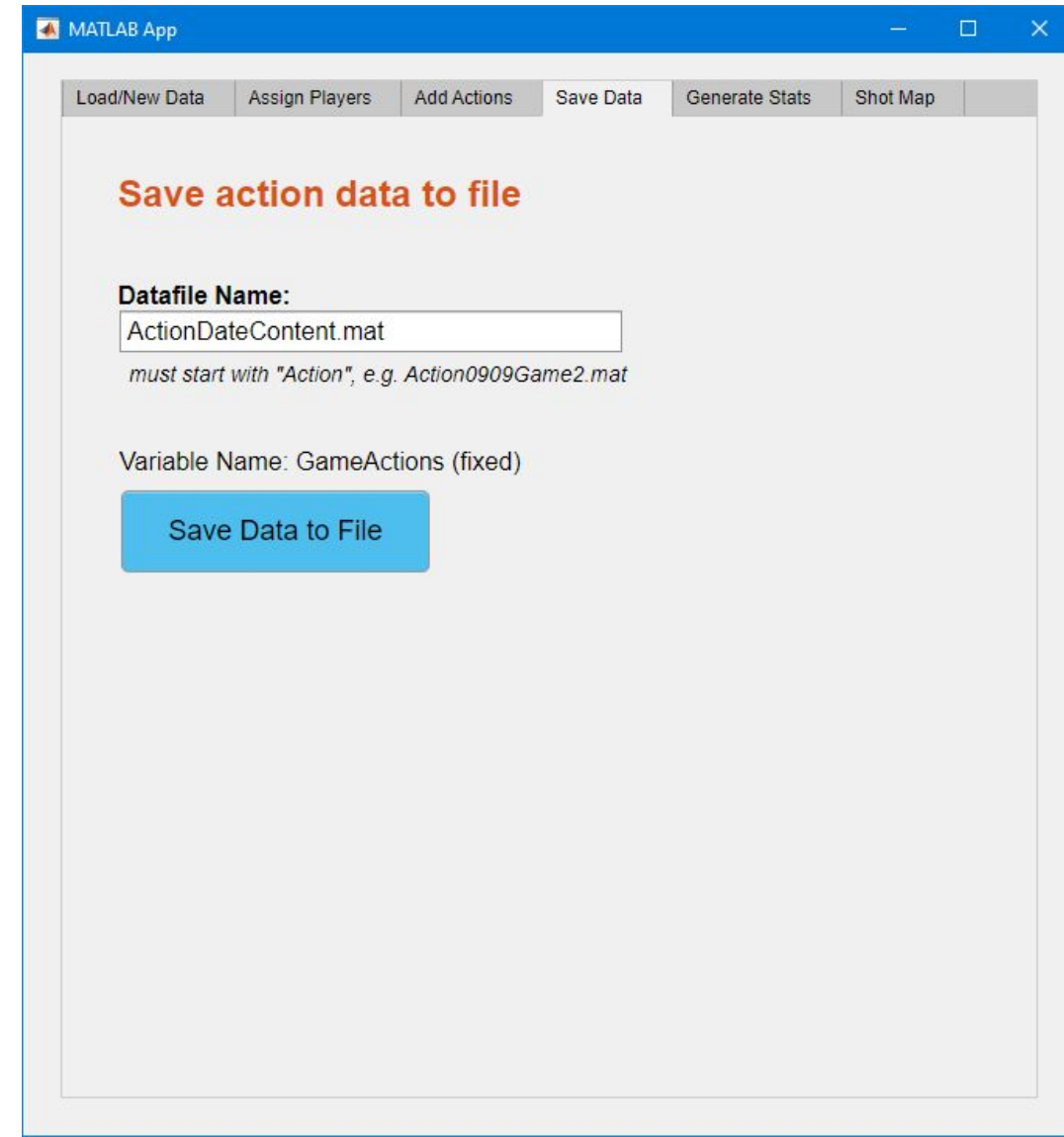
The MATLAB App interface for Tab 3 shows the following components:

- Tabs:** Load/New Data, Assign Players, Add Actions (active), Save Data, Generate Stats, Shot Map.
- Team Selection:** Team 1 and Team 2 lists with player names. Team 1 is currently set to A, and Team 2 is set to B.
- Action Type:** A dropdown menu with options: Pass, Make Shot, Miss Shot, Rebound, Turnover, Defense, Other.
- Player Picture:** A placeholder image of a player.
- Detail Fields:** Detail1 and Detail2 input fields for action details.
- Status:** A green status light in the top right corner.
- Buttons:** Add to Actions, Delete Last Entry, Edit Actions.

Blue arrows indicate the flow of data and actions from the list items to the corresponding UI elements.

# Tab 4: Save game actions to data file

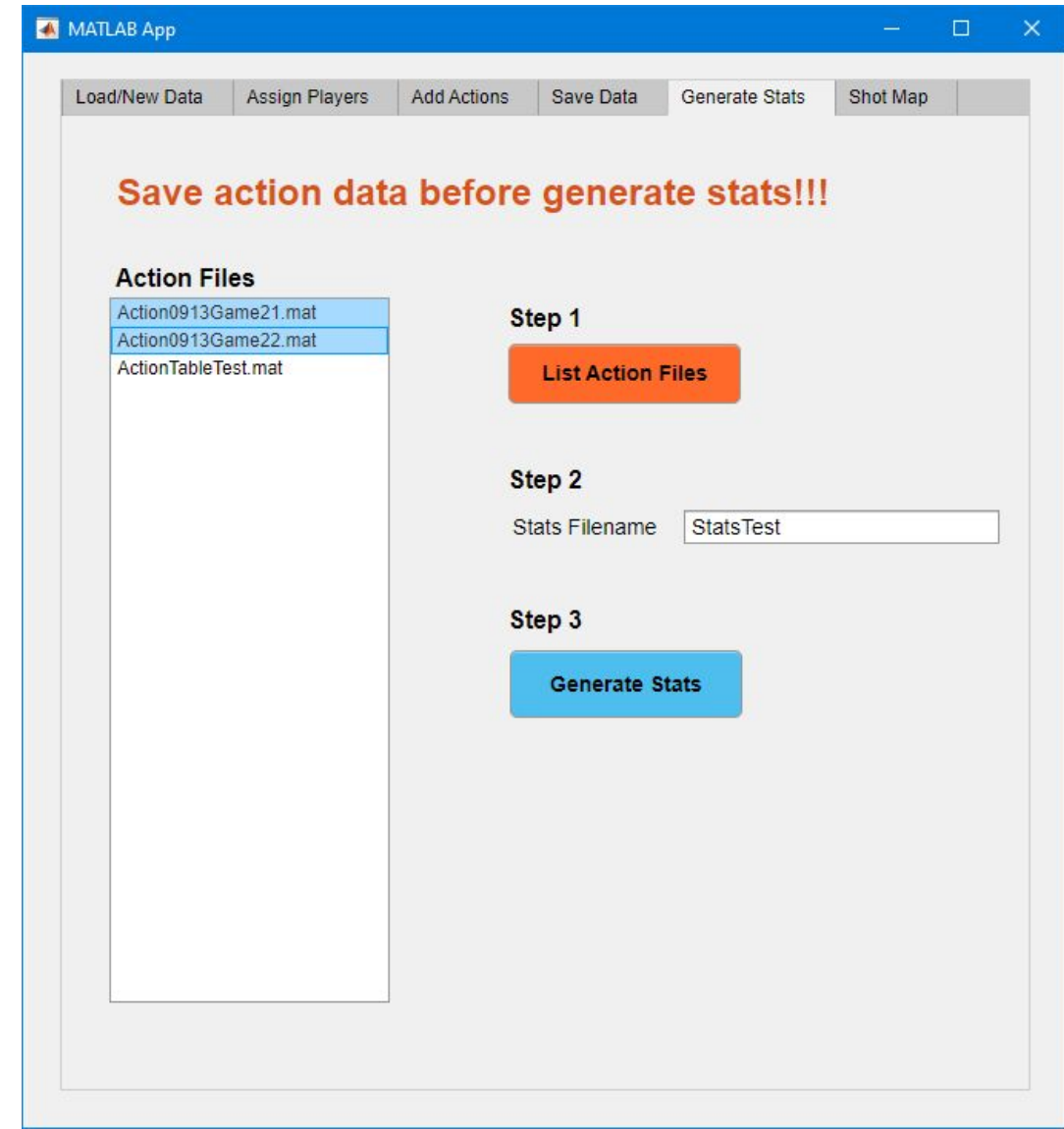
- Start the filename with “Action...”
- Extension must be “.mat”
- [Save Data to File] will save “GameActions” variable to file in the “Data” folder



The image shows a MATLAB App window with a blue title bar. The app has a tabbed interface with the following tabs: Load/New Data, Assign Players, Add Actions, Save Data (which is currently selected), Generate Stats, and Shot Map. The main content area of the 'Save Data' tab is titled 'Save action data to file' in orange text. Below this title, there is a section for 'Datafile Name:' with a text input field containing 'ActionDateContent.mat'. A small italicized note below the input field states: 'must start with "Action", e.g. Action0909Game2.mat'. Below the filename section, the 'Variable Name' is displayed as 'GameActions (fixed)'. At the bottom of the form is a blue button labeled 'Save Data to File'.

# Tab 5: generate box-score stats

- [List Action Files] shows all files in “Data” folder that start with “Action”
  - Select multiple action files will combine all game actions and generate stats
- Specify the name of the stats file
  - Same name used in Tab 6 Shot map.
- [Generate Stats] will generate box-score for each player
- Stats file saved to “Stats” folder
- This tab may run by itself without any inputs in Tabs 1-4





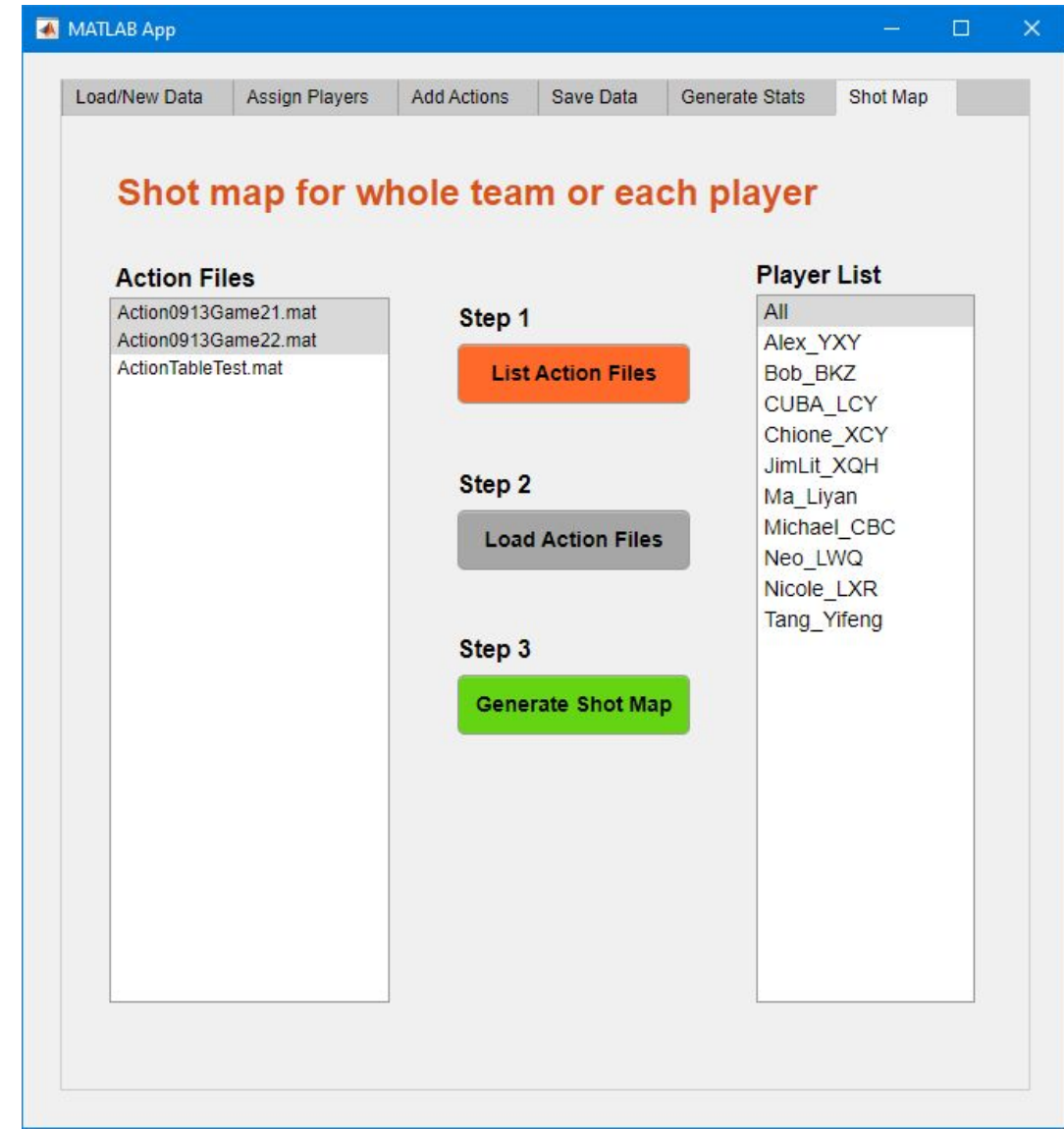
# Tab 5: generate box-score stats

- Sample stats output (.xlsx)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Player	2pt	3pt	Layup	FT	Regular Pass	Threat Pass	Missed Pass	shot allowed	shot contested	Def Reb	Off Reb	Assist	Turnover	Steal	Block	Off-Ball Screen	Screen Assist
2	Alex_YXY	1/2	0/0	0/1	0/0	22	1	2	0	0	2	1	3	2	0	0	0	0
3	Bob_BKZ	5/6	0/0	1/1	0/0	9	3	2	0	0	5	1	2	3	0	0	0	0
4	CUBA_LCY	0/2	1/1	1/3	0/0	19	7	1	0	0	2	2	1	1	1	0	0	0
5	Chione_XCY	2/2	1/5	0/3	0/0	15	2	0	0	0	0	0	0	1	1	0	0	0
6	JimLit_XQH	3/4	3/6	1/2	0/0	5	2	0	0	0	0	2	5	0	1	0	0	0
7	Ma_Liyan	0/0	0/1	2/3	0/0	16	0	0	0	0	2	1	1	0	0	0	0	0
8	Michael_CBC	1/2	0/1	1/1	0/0	4	0	0	0	0	2	2	1	1	0	0	0	0
9	Neo_LWQ	1/2	1/2	4/4	0/0	11	6	0	0	0	7	2	3	2	1	1	0	0
10	Nicole_LXR	1/3	1/4	0/1	0/0	17	0	0	0	0	1	0	0	3	1	0	0	0
11	Tang_Yifeng	0/1	0/1	0/0	0/0	7	2	1	0	0	1	0	3	1	0	1	0	0

# Tab 6: shot maps

- [List Action Files] shows all files in “Data” folder that start with “Action”
  - Select multiple action files will combine all game actions for shot map
- [Load Action Files] will load and combine data files and show player names in these data
- Select players and [Generate Shot Map] for shot maps
  - “All” for all players combined (teams)
  - multiselect to generate multiple maps
- Shot maps saved to “Stats” folder





# Shooting Zones

