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**APPENDIX 1**

**CODING**

functionvarargout = gui\_final(varargin)

gui\_Singleton = 1;

gui\_State = struct('gui\_Name', mfilename, ...

'gui\_Singleton', gui\_Singleton, ...

'gui\_OpeningFcn', @gui\_final\_OpeningFcn, ...

'gui\_OutputFcn', @gui\_final\_OutputFcn, ...

'gui\_LayoutFcn', [] , ...

'gui\_Callback', []);

ifnargin&&ischar(varargin{1})

gui\_State.gui\_Callback = str2func(varargin{1});

end

ifnargout

[varargout{1:nargout}] = gui\_mainfcn(gui\_State, varargin{:});

else

gui\_mainfcn(gui\_State, varargin{:});

end

functiongui\_final\_OpeningFcn(hObject, eventdata, handles, varargin)

handles.output = hObject;

a=ones([200 450]);

axes(handles.axes1);imshow(a);

axes(handles.axes2);imshow(a);

guidata(hObject, handles);

functionvarargout = gui\_final\_OutputFcn(hObject, eventdata, handles)

varargout{1} = handles.output;

functioninp\_voice\_Callback(hObject, eventdata, handles)

cdDatasamples

file=uigetfile('\*.wav');

inp=wavread(file);

[ speech, fs, nbits ] = wavread(file);

cd ..

wavplay(inp,44200);

axes(handles.axes1);

plot(speech);title('Input Voice Signal');

handles.speech=speech;

handles.fs=fs;

handles.nbits=nbits;

handles.file=file;

guidata(hObject, handles);

functionpre\_process\_Callback(hObject, eventdata, handles)

speech=handles.speech;

filt\_sig=medfilt2(speech,[3 3]);

wavplay(filt\_sig,44200);

axes(handles.axes2);

plot(filt\_sig);title('Filtered Signal');

handles.filt\_sig=filt\_sig;

guidata(hObject, handles);

functionfft\_Callback(hObject, eventdata, handles)

filt\_sig=handles.filt\_sig;

[rows cols] = size(filt\_sig);

fft\_sig =fft(filt\_sig,[rows cols]);

figure;

plot(fft\_sig);title('FFT Signal');

handles.fft\_sig=fft\_sig;

guidata(hObject, handles);

functionfeatures\_Callback(hObject, eventdata, handles)

inp=handles.speech;

fs=handles.fs;

nbits=handles.nbits;

fft\_sig=handles.fft\_sig;

f1=max(max(fft\_sig));

f1 = abs(f1);

f2=min(min(fft\_sig));

f2 = abs(f2);

f3=mean(mean(fft\_sig));

f3 = abs(f3);

f5=mean(mean(abs(medfilt1(fft\_sig))));

f5 = abs(f5);

f6=std2(fft\_sig);

f6 = abs(f6);

p= hist(inp);

f7= -sum(sum(p.\*log2(p)));

f7 = abs(f7);

f8=entropy(inp,256);

f8 = abs(f8);

[f9, t] = FeatureTimeZeroCrossingRate(inp, 42100, 256,256);

f9=mean(f9);

f9 = abs(f9);

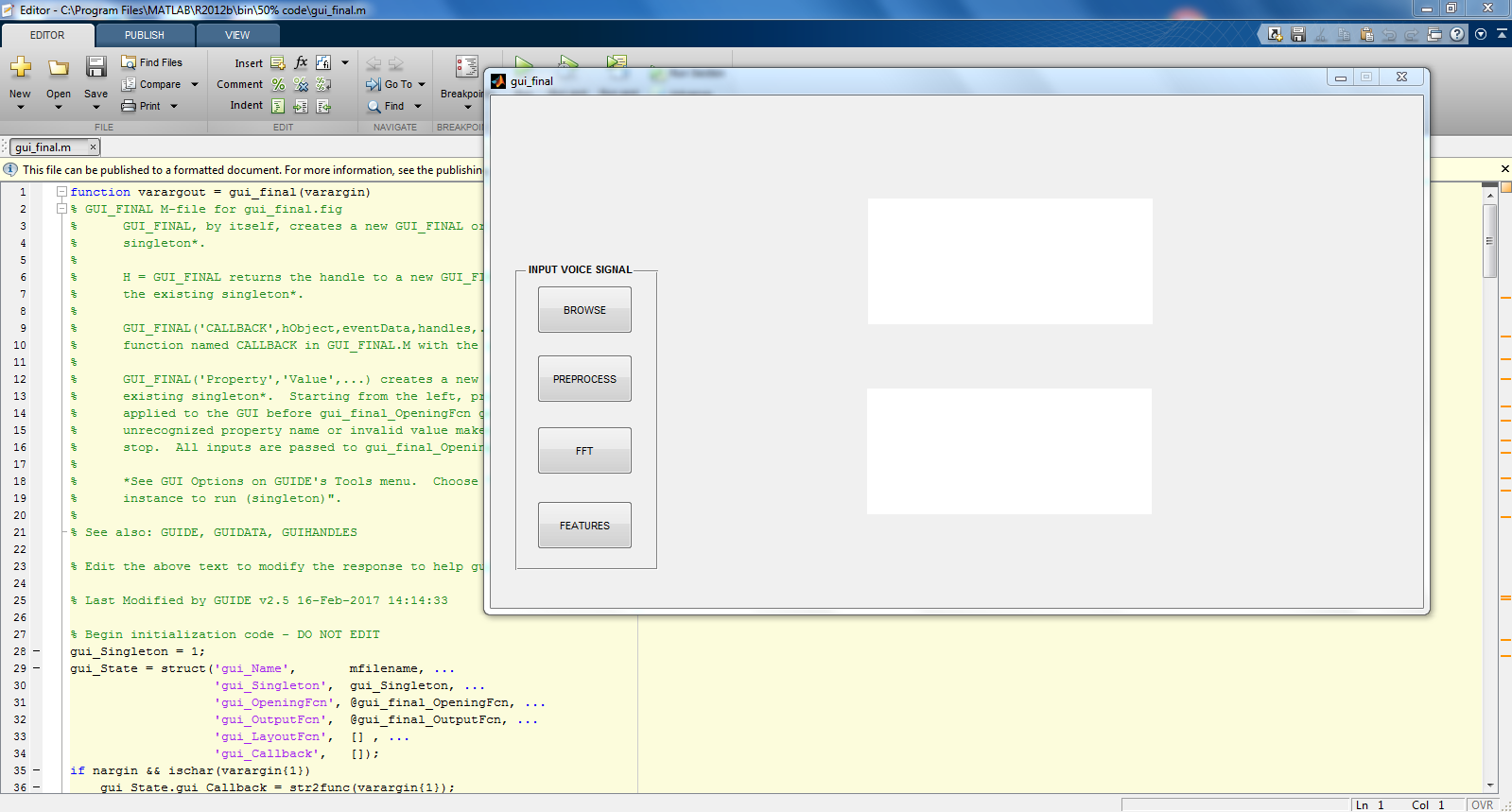
% f10=sum(sum(fft\_sig));

% f10 = abs(f10);

**APPENDIX- 2**

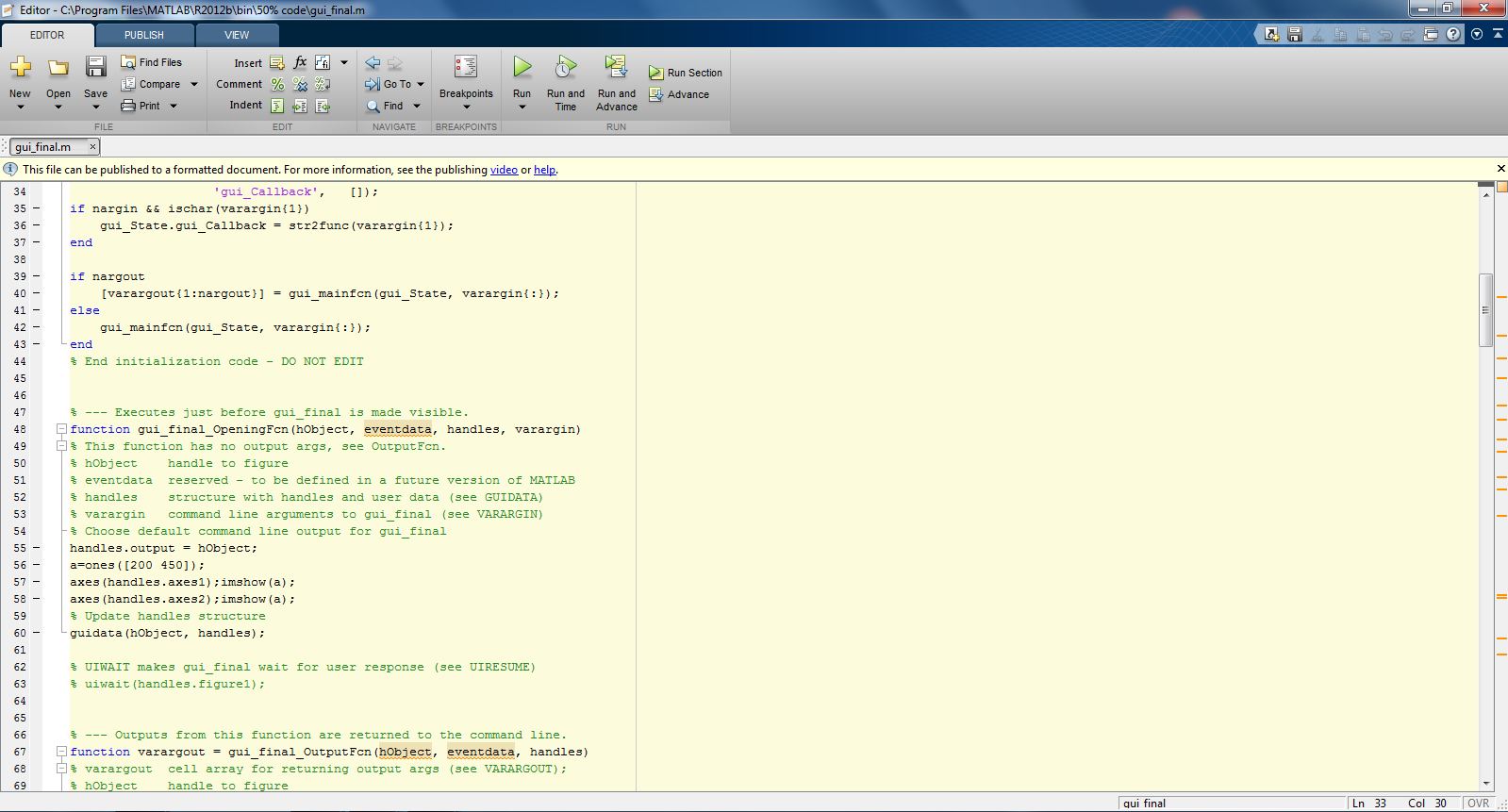
**SAMPLE SCREENSHOT**

**System to detect emotion**

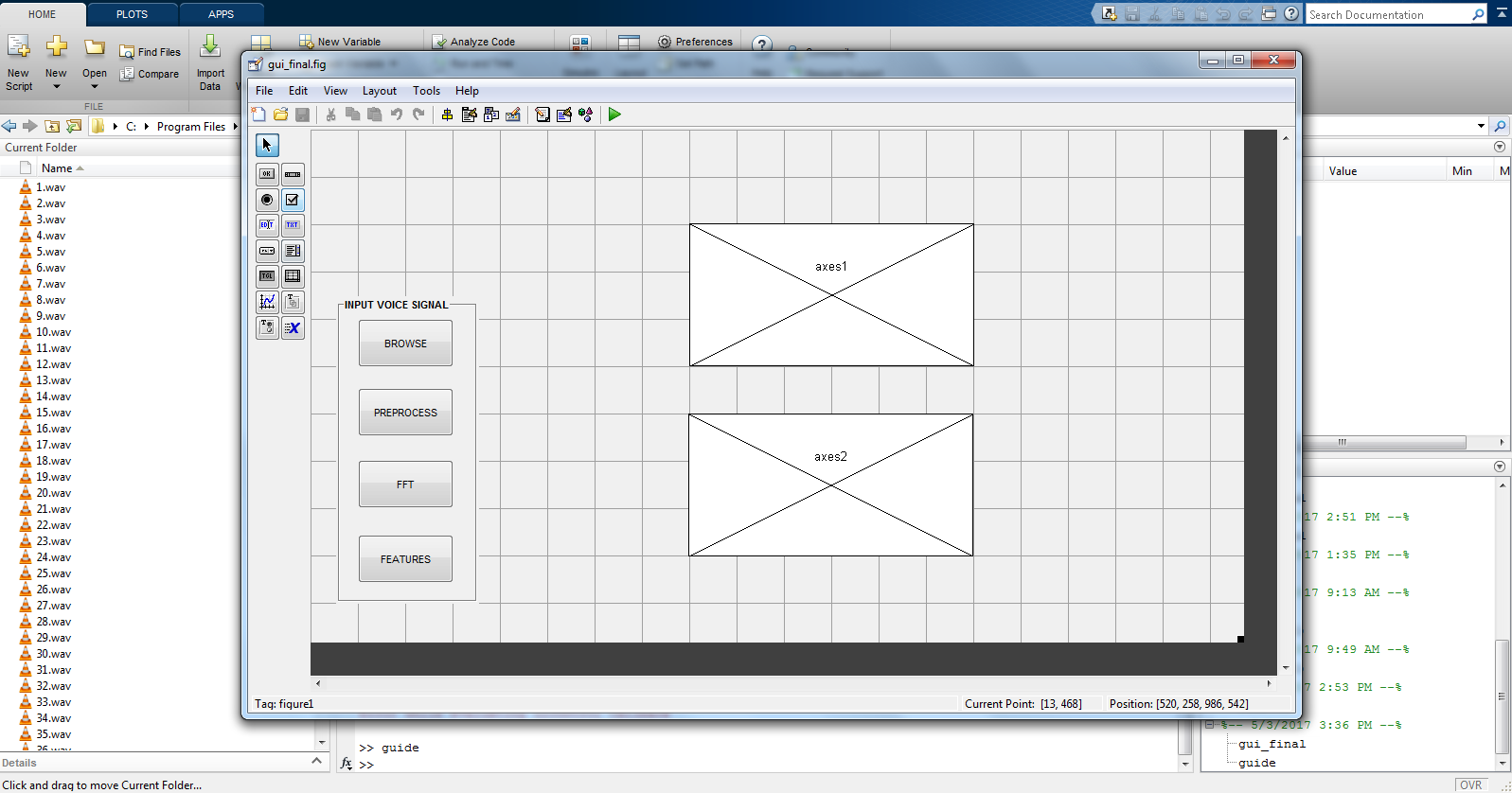
****

**A2.1**

**Coding page in MATLAB**

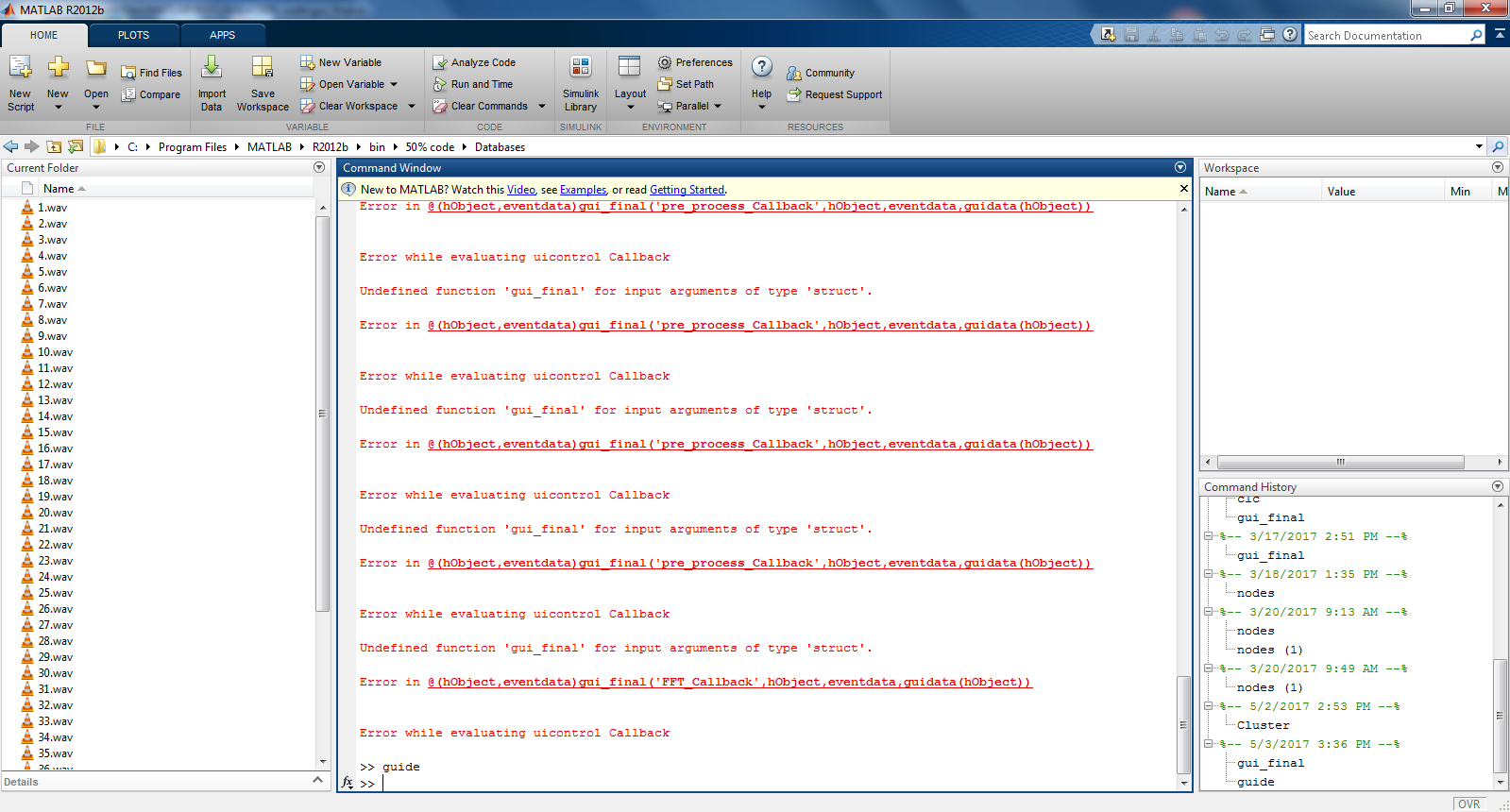
****

**A2.2**

**Graphical User Interface for designing in MATLAB**

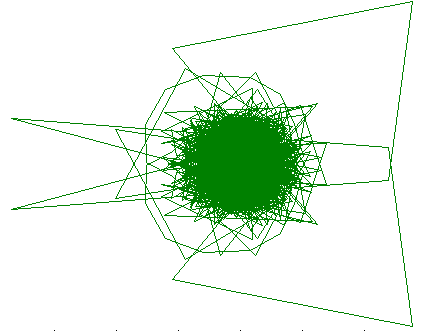
**A2.3**

**Command Window of MATLAB**

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**A2.4**

**Fast Fourier Transform of speech signal**

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**A2.5**

**TECHNICAL BIOGRAPHY**

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**TECHNICAL BIOGRAPHY**

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