Sa se realizeze o interfata grafica, utilizand mediul Matlab, prin care se poate rula o animatie realizata din 10 cadre grafice. Vor exista butoane play, stop, forward, backward.

function varargout = stateoverflow(varargin)

% STATEOVERFLOW MATLAB code for stateoverflow.fig

% STATEOVERFLOW, by itself, creates a new STATEOVERFLOW or raises the existing

% singleton\*.

%

% H = STATEOVERFLOW returns the handle to a new STATEOVERFLOW or the handle to

% the existing singleton\*.

%

% STATEOVERFLOW('CALLBACK',hObject,eventData,handles,...) calls the local

% function named CALLBACK in STATEOVERFLOW.M with the given input arguments.

%

% STATEOVERFLOW('Property','Value',...) creates a new STATEOVERFLOW or raises the

% existing singleton\*. Starting from the left, property value pairs are

% applied to the GUI before stateoverflow\_OpeningFcn gets called. An

% unrecognized property name or invalid value makes property application

% stop. All inputs are passed to stateoverflow\_OpeningFcn via varargin.

%

% \*See GUI Options on GUIDE's Tools menu. Choose "GUI allows only one

% instance to run (singleton)".

%

% See also: GUIDE, GUIDATA, GUIHANDLES

% Edit the above text to modify the response to help stateoverflow

% Last Modified by GUIDE v2.5 23-Dec-2020 12:01:27

% Begin initialization code - DO NOT EDIT

gui\_Singleton = 1;

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

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

'gui\_OpeningFcn', @stateoverflow\_OpeningFcn, ...

'gui\_OutputFcn', @stateoverflow\_OutputFcn, ...

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

'gui\_Callback', []);

if nargin && ischar(varargin{1})

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

end

if nargout

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

else

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

end

% End initialization code - DO NOT EDIT

% --- Executes just before stateoverflow is made visible.

function stateoverflow\_OpeningFcn(hObject, eventdata, handles, varargin)

% This function has no output args, see OutputFcn.

% hObject handle to figure

% eventdata reserved - to be defined in a future version of MATLAB

% handles structure with handles and user data (see GUIDATA)

% varargin command line arguments to stateoverflow (see VARARGIN)

% Choose default command line output for stateoverflow

handles.output = hObject;

handles.VidObj = VideoReader('anghel.mp4');

handles.nFrames = handles.VidObj.NumberOfFrames;

handles.videoPos = 1; % Current video position, starts at first frame.

snapshot = read(handles.VidObj,handles.videoPos); %Here we use the stored video position

imshow(snapshot),title(handles.videoPos);

% Choose default command line output for stateoverflow

handles.output = hObject;

% Update handles structure

guidata(hObject, handles);

% UIWAIT makes stateoverflow wait for user response (see UIRESUME)

% uiwait(handles.figure1);

% --- Outputs from this function are returned to the command line.

function varargout = stateoverflow\_OutputFcn(hObject, eventdata, handles)

% varargout cell array for returning output args (see VARARGOUT);

% hObject handle to figure

% eventdata reserved - to be defined in a future version of MATLAB

% handles structure with handles and user data (see GUIDATA)

% Get default command line output from handles structure

varargout{1} = handles.output;

% --- Executes on button press in pushbutton2.

function pushbutton2\_Callback(hObject, eventdata, handles)

% hObject handle to pushbutton2 (see GCBO)

% eventdata reserved - to be defined in a future version of MATLAB

% handles structure with handles and user data (see GUIDATA)

% Hint: get(hObject,'Value') returns toggle state of pushbutton2

h = warndlg('Butonul play a fost apasat, pentru a opri apasa din nou','Play')

while get(hObject,'Value') && handles.videoPos < handles.nFrames

pause(0.5);

handles.videoPos=handles.videoPos+1; % Increment the stored position

snapshot = read(handles.VidObj,handles.videoPos); % Here we use the stored video position

imshow(snapshot),title(handles.videoPos);

end

guidata(hObject,handles) % Save the modifications done at the handles structure at the figure handle

% --- Executes on button press in pushbutton3.

function pushbutton3\_Callback(hObject, eventdata, handles)

% hObject handle to pushbutton3 (see GCBO)

% eventdata reserved - to be defined in a future version of MATLAB

% handles structure with handles and user data (see GUIDATA)

if get(hObject,'Value')

handles.videoPos=handles.videoPos+1; % Increment the stored position

snapshot = read(handles.VidObj,handles.videoPos); % Here we use the stored video position

imshow(snapshot),title(handles.videoPos);

end

guidata(hObject,handles) % Save the modifications done at the handles structure at the figure handle

% --- Executes on button press in pushbutton4.

function pushbutton4\_Callback(hObject, eventdata, handles)

% hObject handle to pushbutton4 (see GCBO)

% eventdata reserved - to be defined in a future version of MATLAB

% handles structure with handles and user data (see GUIDATA)

if get(hObject,'Value') && handles.videoPos>1

handles.videoPos=handles.videoPos-1; % Increment the stored position

snapshot = read(handles.VidObj,handles.videoPos); % Here we use the stored video position

imshow(snapshot),title(handles.videoPos);

end

guidata(hObject,handles) % Save the modifications done at the handles structure at the figure handle

% --- Executes on button press in pushbutton5.

function pushbutton5\_Callback(hObject, eventdata, handles)

% hObject handle to pushbutton5 (see GCBO)

% eventdata reserved - to be defined in a future version of MATLAB

% handles structure with handles and user data (see GUIDATA)

if get(hObject,'Value') && handles.videoPos<handles.nFrames-9

handles.videoPos=handles.videoPos+10; % Increment the stored position

snapshot = read(handles.VidObj,handles.videoPos); % Here we use the stored video position

imshow(snapshot),title(handles.videoPos);

end

guidata(hObject,handles) % Save the modifications done at the handles structure at the figure handle

% --- Executes on button press in pushbutton6.

function pushbutton6\_Callback(hObject, eventdata, handles)

% hObject handle to pushbutton6 (see GCBO)

% eventdata reserved - to be defined in a future version of MATLAB

% handles structure with handles and user data (see GUIDATA)

if get(hObject,'Value') && handles.videoPos>10

handles.videoPos=handles.videoPos-10; % Increment the stored position

snapshot = read(handles.VidObj,handles.videoPos); % Here we use the stored video position

imshow(snapshot),title(handles.videoPos);

end

guidata(hObject,handles) % Save the modifications done at the handles structure at the figure handle





