

LAMPIRAN

LAMPIRAN 1

Tabel Penentuan Variabel Input dan Output

Fungsi	Nama Variabel	Semesta Pembicaraan	Himpunan Fuzzy	Domain	
Input	Nilai Tes Tulis	[0-100]	Tinggi	[50-100]	
			Rendah	[0-80]	
	Nilai Matematika	[0-100]	Tinggi	[65-100]	
			Rendah	[0-80]	
	Nilai IPA	[0-100]	Tinggi	[69-100]	
			Rendah	[0-80]	
	Nilai TIK	[0-100]	Tinggi	[65-100]	
			Rendah	[0-80]	
	Nilai Tes Warna	[0-100]	Tinggi	[69-100]	
			Rendah	[0-80]	
	Output	TKJ	[0-100]	Tinggi	[50-100]
				Rendah	[0-80]
TKR		[0-100]	Tinggi	[50-100]	
			Rendah	[0-80]	
AK		[0-100]	Tinggi	[50-100]	
			Rendah	[0-80]	
ATP		[0-100]	Tinggi	[50-100]	
			Rendah	[0-80]	

LAMPIRAN 2

Rancangan Aturan (*Rules*) Fuzzy Yang Terbentuk

a) Aturan (*rules*) untuk jurusan TKJ (Teknik Komputer dan Jaringan)

Tabel 3.3 Aturan (*rules*) untuk jurusan TKJ

Kode	Aturan
[R1]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Tinggi AND nilai TIK Tinggi AND nilai Tes Warna tinggi THEN TKJ tinggi
[R2]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Tinggi AND nilai TIK Tinggi AND nilai Tes Warna Rendah THEN TKJ Rendah
[R3]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Tinggi AND nilai TIK Rendah AND nilai Tes Warna tinggi THEN TKJ Rendah
[R4]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Tinggi AND nilai TIK Rendah AND nilai Tes Warna Rendah THEN TKJ Rendah
[R5]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Rendah AND nilai TIK Tinggi AND nilai Tes Warna Tinggi THEN TKJ Tinggi
[R6]	IF Nilai Tes Tulis tinggi AND nilai Matematika Rendah AND nilai TIK Tinggi AND nilai Tes Warna Rendah THEN TKJ Rendah
[R7]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Rendah AND nilai TIK Rendah AND nilai Tes Warna Tinggi THEN TKJ Rendah
[R8]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Rendah AND nilai TIK Rendah AND nilai Tes Warna Rendah THEN TKJ Rendah
[R9]	IF Nilai Tes Tulis Rendah AND nilai Matematika Tinggi AND nilai TIK Tinggi AND nilai Tes Warna Tinggi THEN TKJ Tinggi
[R10]	IF Nilai Tes Tulis Rendah AND nilai Matematika Tinggi AND nilai TIK Tinggi AND nilai Tes Warna Rendah THEN TKJ Rendah
[R11]	IF Nilai Tes Tulis Rendah AND nilai Matematika Tinggi AND nilai TIK Rendah AND nilai Tes Warna Tinggi THEN TKJ Rendah
[R12]	IF Nilai Tes Tulis Rendah AND nilai Matematika Tinggi AND nilai TIK Rendah AND nilai Tes Warna Rendah THEN TKJ Rendah
[R13]	IF Nilai Tes Tulis Rendah AND nilai Matematika Rendah AND nilai TIK Tinggi AND nilai Tes Warna Tinggi THEN TKJ Rendah

[R14]	IF Nilai Tes Tulis Rendah AND nilai Matematika Rendah AND nilai TIK Tinggi AND nilai Tes Warna Rendah THEN TKJ Rendah
[R15]	IF Nilai Tes Tulis Rendah AND nilai Matematika Rendah AND nilai TIK Rendah AND nilai Tes Warna Tinggi THEN TKJ Rendah
[R16]	IF Nilai Tes Tulis Rendah AND nilai Matematika Rendah AND nilai TIK Rendah AND nilai Tes Warna Rendah THEN TKJ Rendah

b) Aturan (*rules*) untuk jurusan TKR (Teknik Kendaraan Ringan)

Tabel 3.4 Aturan (*rule*) untuk jurusan TKR

Kode	Aturan
[R17]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Tinggi AND nilai Tes Warna Tinggi AND THEN TKR tinggi
[R18]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Tinggi AND nilai Tes Warna Rendah THEN TKR Rendah
[R19]	IF Nilai Tes Tulis Tinggi AND nilai Matematika rendah AND nilai Tes Warna tinggi THEN TKR tinggi
[R20]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Rendah AND nilai Tes Warna Rendah THEN TKR Rendah
[R21]	IF Nilai Tes Tulis Rendah AND nilai Matematika Tinggi AND nilai Tes Warna Tinggi THEN TKR Tinggi
[R22]	IF Nilai Tes Tulis Rendah AND nilai Matematika Tinggi AND nilai Tes Warna Rendah THEN TKR Rendah
[R23]	IF Nilai Tes Tulis Rendah AND nilai Matematika Rendah AND nilai Tes Warna Tinggi THEN TKR Rendah
[R24]	IF Nilai Tes Tulis Rendah AND nilai Matematika Rendah AND nilai Tes Warna Rendah THEN TKR Rendah

c) Aturan (*rules*) untuk jurusan AK (Akuntansi)

Tabel 3.5 Aturan (*rule*) untuk jurusan AK

Kode	Aturan
[R25]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Tinggi AND nilai TIK Tinggi THEN Akuntansi Tinggi
[R26]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Tinggi AND nilai TIK Rendah THEN Akuntansi Tinggi
[R27]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Rendah AND nilai TIK Tinggi THEN Akuntansi Rendah
[R28]	IF Nilai Tes Tulis Tinggi AND nilai Matematika Rendah AND nilai TIK Rendah THEN Akuntansi Rendah
[R29]	IF Nilai Tes Tulis Rendah AND nilai Matematika Tinggi AND nilai TIK Tinggi THEN Akuntansi Tinggi
[R30]	IF Nilai Tes Tulis Rendah AND nilai Matematika Tinggi AND nilai TIK Rendah THEN Akuntansi Rendah
[R31]	IF Nilai Tes Tulis Rendah AND nilai Matematika Rendah AND nilai TIK Tinggi THEN Akuntansi Rendah
[R32]	IF Nilai Tes Tulis Rendah AND nilai Matematika Rendah AND nilai TIK Rendah THEN Akuntansi Rendah

d) Aturan (*rules*) untuk jurusan ATP (Agribisnis Tanaman Perkebunan)

Tabel 3.6 Aturan (*rule*) untuk jurusan ATP

Kode	Aturan
[R33]	IF Nilai Tes Tulis Tinggi AND nilai IPA Tinggi THEN ATP tinggi
[R34]	IF Nilai Tes Tulis Tinggi AND nilai IPA Rendah THEN ATP Rendah
[R35]	IF Nilai Tes Tulis Rendah AND nilai IPA Tinggi THEN ATP Rendah
[R36]	IF Nilai Tes Tulis Rendah AND nilai IPA Rendah THEN ATP Rendah

LAMPPIRAN 3

Coding Matlab Hamalan Utama

```
function varargout = home(varargin)
% HOME MATLAB code for home.fig
%     HOME, by itself, creates a new HOME or raises the existing
%     singleton*.
%
%     H = HOME returns the handle to a new HOME or the handle to
%     the existing singleton*.
%
%     HOME('CALLBACK',hObject,eventData,handles,...) calls the
local
%     function named CALLBACK in HOME.M with the given input
arguments.
%
%     HOME('Property','Value',...) creates a new HOME or raises
the
%     existing singleton*. Starting from the left, property
value pairs are
%     applied to the GUI before home_OpeningFcn gets called. An
%     unrecognized property name or invalid value makes property
application
%     stop. All inputs are passed to home_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 home

% Last Modified by GUIDE v2.5 09-Feb-2019 22:35:37

% Begin initialization code - DO NOT EDIT
gui_Singleton = 1;
gui_State = struct('gui_Name',       mfilename, ...
                  'gui_Singleton',   gui_Singleton, ...
                  'gui_OpeningFcn', @home_OpeningFcn, ...
                  'gui_OutputFcn',  @home_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 home is made visible.
```

```

function home_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 home (see VARARGIN)

% Choose default command line output for home
handles.output = hObject;

% Update handles structure
guidata(hObject, handles);

% UIWAIT makes home wait for user response (see UIRESUME)
% uiwait(handles.figure1);

% --- Outputs from this function are returned to the command line.
function varargout = home_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;

% -----
----
function home_Callback(hObject, eventdata, handles)
% hObject    handle to home (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
home

% -----
----
function profil_Callback(hObject, eventdata, handles)
% hObject    handle to profil (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)

% -----
----
function aboutme_Callback(hObject, eventdata, handles)
% hObject    handle to aboutme (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)

```



```

% --- Executes on button press in exitbutton.
function exitbutton_Callback(hObject, eventdata, handles)
% hObject    handle to exitbutton (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
close

% --- Executes on button press in logintonext.
function logintonext_Callback(hObject, eventdata, handles)
% hObject    handle to logintonext (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
login2

% --- Executes on button press in homebutton.
function homebutton_Callback(hObject, eventdata, handles)
% hObject    handle to homebutton (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
home

% --- Executes on button press in kriteriabutton.
function kriteriabutton_Callback(hObject, eventdata, handles)
% hObject    handle to kriteriabutton (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
kriteria

% --- Executes on button press in hasilbutton.
function hasilbutton_Callback(hObject, eventdata, handles)
% hObject    handle to hasilbutton (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)
spkguide

% --- Executes during object creation, after setting all
properties.
function axes2_CreateFcn(hObject, eventdata, handles)
% hObject    handle to axes2 (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    empty - handles not created until after all
CreateFcns called

% Hint: place code in OpeningFcn to populate axes2
gambar=imread('dj.jpg');
imshow(gambar)

```

```

% --- Executes during object creation, after setting all
properties.
function axes1_CreateFcn(hObject, eventdata, handles)
% hObject    handle to axes1 (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    empty - handles not created until after all
CreateFcns called

% Hint: place code in OpeningFcn to populate axes1
image1=imread('logosmk.jpg');
imshow(image1)

```

Coding Matlab Form Perhitungan Rekomendasi Jurusan

```

function varargout = spkguide(varargin)
% SPKGUIDE MATLAB code for spkguide.fig
%     SPKGUIDE, by itself, creates a new SPKGUIDE or raises the
existing
%     singleton*.
%
%     H = SPKGUIDE returns the handle to a new SPKGUIDE or the
handle to
%     the existing singleton*.
%
%     SPKGUIDE('CALLBACK',hObject,eventData,handles,...) calls
the local
%     function named CALLBACK in SPKGUIDE.M with the given input
arguments.
%
%     SPKGUIDE('Property','Value',...) creates a new SPKGUIDE or
raises the
%     existing singleton*. Starting from the left, property
value pairs are
%     applied to the GUI before spkguide_OpeningFcn gets called.
An
%     unrecognized property name or invalid value makes property
application
%     stop. All inputs are passed to spkguide_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 spkguide

% Last Modified by GUIDE v2.5 20-Feb-2019 23:17:06

% Begin initialization code - DO NOT EDIT
gui_Singleton = 1;
gui_State = struct('gui_Name',       mfilename, ...
                  'gui_Singleton',  gui_Singleton, ...
                  'gui_OpeningFcn', @spkguide_OpeningFcn, ...
                  'gui_OutputFcn',  @spkguide_OutputFcn, ...

```

```

        'gui_LayoutFcn', [], ...
        'gui_Callback', []);
if nargin && ischar(varargin{1})
    gui_State.gui_Callback = str2func(varargin{1});
end

if nargin
    [varargout{1:nargout}] = gui_mainfcn(gui_State, varargin{:});
else
    gui_mainfcn(gui_State, varargin{:});
end
% End initialization code - DO NOT EDIT

% --- Executes just before spkguide is made visible.
function spkguide_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 spkguide (see VARARGIN)

% Choose default command line output for spkguide
handles.output = hObject;

% Update handles structure
guidata(hObject, handles);

% UIWAIT makes spkguide wait for user response (see UIRESUME)
% uiwait(handles.figure1);

% --- Outputs from this function are returned to the command line.
function varargout = spkguide_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;

function rekjurusan_Callback(hObject, eventdata, handles)
% hObject    handle to rekjurusan (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)

% Hints: get(hObject,'String') returns contents of rekjurusan as
text

```

```

%         str2double(get(hObject,'String')) returns contents of
rekjurusan as a double

% --- Executes during object creation, after setting all
properties.
function rekjurusan_CreateFcn(hObject, eventdata, handles)
% hObject    handle to rekjurusan (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    empty - handles not created until after all
CreateFcns called
out

% Hint: edit controls usually have a white background on Windows.
%         See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

function Nilai_Tes_Callback(hObject, eventdata, handles)
% hObject    handle to Nilai_Tes (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    structure with handles and user data (see GUIDATA)

% Hints: get(hObject,'String') returns contents of Nilai_Tes as
text
%         str2double(get(hObject,'String')) returns contents of
Nilai_Tes as a double
Nilai_Tes=str2double(get(hObject,'String'));
handles.Nilai_Tes=Nilai_Tes;
guidata(hObject,handles);

% --- Executes during object creation, after setting all
properties.
function Nilai_Tes_CreateFcn(hObject, eventdata, handles)
% hObject    handle to Nilai_Tes (see GCBO)
% eventdata  reserved - to be defined in a future version of
MATLAB
% handles    empty - handles not created until after all
CreateFcns called

% Hint: edit controls usually have a white background on Windows.
%         See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

```

```

function Nilai_MTK_Callback(hObject, eventdata, handles)
% hObject     handle to Nilai_MTK (see GCBO)
% eventdata   reserved - to be defined in a future version of
MATLAB
% handles     structure with handles and user data (see GUIDATA)

% Hints: get(hObject,'String') returns contents of Nilai_MTK as
text
%           str2double(get(hObject,'String')) returns contents of
Nilai_MTK as a double
Nilai_MTK=str2double(get(hObject,'String'));
handles.Nilai_MTK=Nilai_MTK;
guidata(hObject,handles);

% --- Executes during object creation, after setting all
properties.
function Nilai_MTK_CreateFcn(hObject, eventdata, handles)
% hObject     handle to Nilai_MTK (see GCBO)
% eventdata   reserved - to be defined in a future version of
MATLAB
% handles     empty - handles not created until after all
CreateFcns called

% Hint: edit controls usually have a white background on Windows.
%           See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUiControlBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

function Nilai_IPA_Callback(hObject, eventdata, handles)
% hObject     handle to Nilai_IPA (see GCBO)
% eventdata   reserved - to be defined in a future version of
MATLAB
% handles     structure with handles and user data (see GUIDATA)

% Hints: get(hObject,'String') returns contents of Nilai_IPA as
text
%           str2double(get(hObject,'String')) returns contents of
Nilai_IPA as a double
Nilai_IPA=str2double(get(hObject,'String'));
handles.Nilai_IPA=Nilai_IPA;
guidata(hObject,handles);

% --- Executes during object creation, after setting all
properties.
function Nilai_IPA_CreateFcn(hObject, eventdata, handles)
% hObject     handle to Nilai_IPA (see GCBO)
% eventdata   reserved - to be defined in a future version of
MATLAB
% handles     empty - handles not created until after all
CreateFcns called

% Hint: edit controls usually have a white background on Windows.
%           See ISPC and COMPUTER.

```

```

if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

```

```

function Nilai_TIK_Callback(hObject, eventdata, handles)
% hObject     handle to Nilai_TIK (see GCBO)
% eventdata   reserved - to be defined in a future version of
MATLAB
% handles     structure with handles and user data (see GUIDATA)

% Hints: get(hObject,'String') returns contents of Nilai_TIK as
text
%           str2double(get(hObject,'String')) returns contents of
Nilai_TIK as a double
Nilai_TIK=str2double(get(hObject,'String'));
handles.Nilai_TIK=Nilai_TIK;
guidata(hObject, handles);

```

```

% --- Executes during object creation, after setting all
properties.
function Nilai_TIK_CreateFcn(hObject, eventdata, handles)
% hObject     handle to Nilai_TIK (see GCBO)
% eventdata   reserved - to be defined in a future version of
MATLAB
% handles     empty - handles not created until after all
CreateFcns called

% Hint: edit controls usually have a white background on Windows.
%           See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUicontrolBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

```

```

function Nilai_Warna_Callback(hObject, eventdata, handles)
% hObject     handle to Nilai_Warna (see GCBO)
% eventdata   reserved - to be defined in a future version of
MATLAB
% handles     structure with handles and user data (see GUIDATA)

% Hints: get(hObject,'String') returns contents of Nilai_Warna as
text
%           str2double(get(hObject,'String')) returns contents of
Nilai_Warna as a double
Nilai_Warna=str2double(get(hObject,'String'));
handles.Nilai_Warna=Nilai_Warna;
guidata(hObject,handles);

% --- Executes during object creation, after setting all
properties.
function Nilai_Warna_CreateFcn(hObject, eventdata, handles)
% hObject     handle to Nilai_Warna (see GCBO)

```

```

% eventdata reserved - to be defined in a future version of
MATLAB
% handles empty - handles not created until after all
CreateFcns called

% Hint: edit

% See ISPC and COMPUTER.
if ispc && isequal(get(hObject,'BackgroundColor'),
get(0,'defaultUiControlBackgroundColor'))
    set(hObject,'BackgroundColor','white');
end

% --- Executes on button press in Running.
function Running_Callback(hObject, eventdata, handles)
% hObject handle to Running (see GCBO)
% eventdata reserved - to be defined in a future version of
MATLAB
% handles structure with handles and user data (see GUIDATA)
fis=readfis('jurusan.fis');
input=[handles.Nilai_Tes; handles.Nilai_MTK; handles.Nilai_IPA;
handles.Nilai_TIK; handles.Nilai_Warna;];
out=evalfis(input,fis)

if out(1)>=50
msgbox ('Teknik Komputer dan Jaringan')
else if out(2)>=50
    msgbox ('Akuntansi');
    else if out(3)>=50
        msgbox('Teknik Kendaraan Ringan / Otomotif');
        else if out(4)>=50
            msgbox('Agribisnis Tanaman Perkebunan');
            else
                msgbox('Maaf anda tidak memenuhi syarat');
            end
        end
    end
end
end

% --- Executes on button press in exit.
function exit_Callback(hObject, eventdata, handles)
% hObject handle to exit (see GCBO)
% eventdata reserved - to be defined in a future version of
MATLAB
% handles structure with handles and user data (see GUIDATA)
close

% --- If Enable == 'on', executes on mouse press in 5 pixel
border.
% --- Otherwise, executes on mouse press in 5 pixel border or over
Running.

```

```
% --- Executes on button press in backhomebutton.  
function backhomebutton_Callback(hObject, eventdata, handles)  
% hObject    handle to backhomebutton (see GCBO)  
% eventdata  reserved - to be defined in a future version of  
MATLAB  
% handles    structure with handles and user data (see GUIDATA)  
home
```