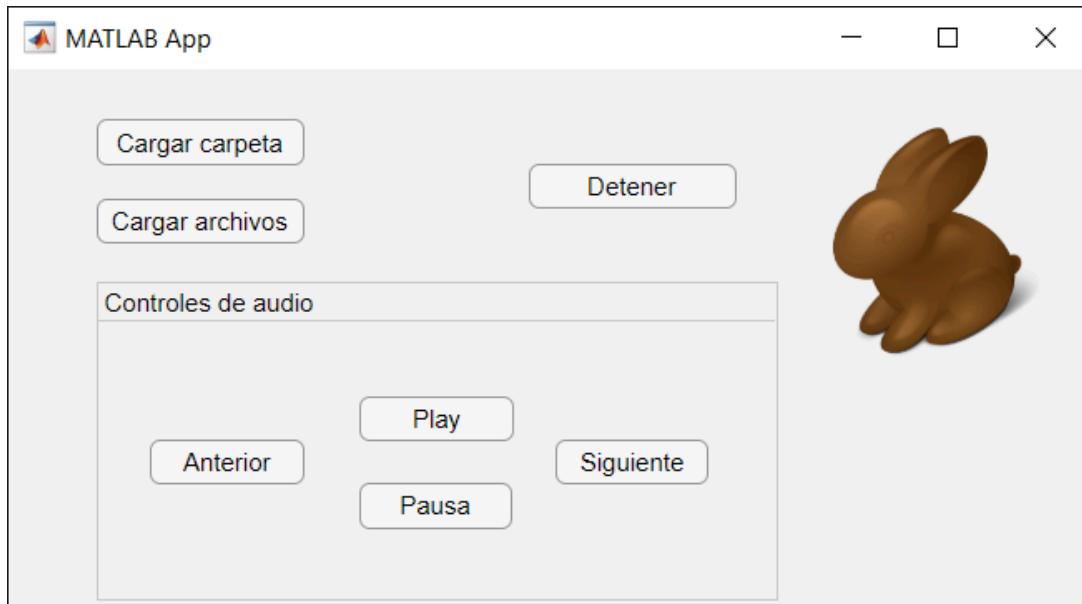


Reproductor de música Versión App

Esta versión es usando la App Designer de MATLAB, esta es una captura, a diferencia de la otra versión, esta quita el botón de continuar y le pasa la función directamente al botón de Play, también cuenta con la opción de cargar los archivos de música de una carpeta o seleccionar los que queramos.



Código usado para la App

La primera línea la comento porque no se pueden guardar clases como archivos mlx, y por ello tampoco se puede exportar como PDF.

```
%classdef ReproductorDeMusica < matlab.apps.AppBase

% Properties that correspond to app components
properties (Access = public)
    UIFigure                matlab.ui.Figure
    Image                   matlab.ui.control.Image
    DetenerButton           matlab.ui.control.Button
    ControlesdeaudioButtonGroup matlab.ui.container.ButtonGroup
    PlayButton              matlab.ui.control.Button
    PausaButton             matlab.ui.control.Button
    SiguienteButton         matlab.ui.control.Button
    AnteriorButton          matlab.ui.control.Button
    CargararchivosButton    matlab.ui.control.Button
    CargarcarpetaButton     matlab.ui.control.Button
end

% Callbacks that handle component events
methods (Access = private)

% Button pushed function: PlayButton
function PlayButtonPushed(app, event)
    global canciones c player playestado
```

```

    try
        clc,
    if playestado == 1
        play(player);
        fprintf("\n\t >> Reproduciendo: %s <<\n\n",canciones(c))
    else
        resume(player);
        fprintf("\n\t >> Reanudando canción: %s <<\n\n",canciones(c))
        playestado = 1;
    end

    catch
        disp('Error, carga la música')
    end

end

% Selection changed function: ControlesdeaudioButtonGroup
function ControlesdeaudioButtonGroupSelectionChanged(app, event)
    global c playestado

    c=1;
    playestado = 1;
end

% Button pushed function: PausaButton
function PausaButtonPushed(app, event)
    global player playestado
    try
        clc,
        pause(player)
        playestado = 0;
        clc
        fprintf("\n\t >> Reproductor de música pausado.<<\n\n")
    catch
        disp('Error, carga la música')
    end
end

end

% Button pushed function: SiguienteButton
function SiguienteButtonPushed(app, event)
    global canciones c player y Fs dircanciones
    try
        c=c+1;

    if c>length(dircanciones) || c == 0
        c=1;
    end

        clc,
        [y,Fs] = audioread(dircanciones(c));
        player = audioplayer(y,Fs);
        play(player);

```

```

        fprintf("\n\t >> Reproduciendo: %s <<\n\n",canciones(c))

    catch
        disp('Error, carga la música')
    end

end

% Button pushed function: DetenerButton
function DetenerButtonPushed(app, event)
    global player
    try
        stop(player),
        clc,
        clear,
        disp(">> Reproductor de audio detenido <<")

    catch
        disp('Error, carga la música')
    end

end

% Button pushed function: AnteriorButton
function AnteriorButtonPushed(app, event)
    global canciones c player y Fs dircanciones
    try
        c=c-1;
        if c<=0
            c=length(canciones);
        end
        clc,
        [y,Fs] = audioread(dircanciones(c));
        player = audioplayer(y,Fs);
        play(player);
        fprintf("\n\t >> Reproduciendo: %s <<\n\n",canciones(c))
    catch
        disp('Error, carga la música')
    end

end

% Image clicked function: Image
function ImageClicked(app, event)

end

% Button pushed function: CargarcarpetaButton
function CargarcarpetaButtonPushed(app, event)
    global canciones c player playestado dircanciones d y Fs

    try
        d = uigetdir('C:\');
        direc = dir(d);

```

```

T = struct2table(direc);
canciones = string(T.name);
canciones(1)=[];
canciones(1)=[];
c=1;
playestado = 1;

dircanciones = d+"\ cantaciones;
clc
fprintf("\n\t >> cargando carpeta: %s <<\n\n",d)
[y,Fs] = audioread(dircanciones(c));
player = audioplayer(y,Fs);
catch
    clc
    disp("Error al cargar la carpeta")
end
stop(player)
end

% Button pushed function: CargararchivosButton
function CargararchivosButtonPushed(app, event)
    global dircanciones player canciones d c

    try
        stop(player)

        [canciones, d] = uigetfile({'*.wav;*.mp3;*.mp4;*.avi;' ...
            '*.wmv;*.m4v;*.ogg;*.flac;' ...
            '*.au;*.aiff;*.aif;*.aifc;' ...
            '*.m4a;*.mp4;'}], 'Selección de Audio', ...
            'MultiSelect', 'on');
        canciones = string(canciones);
        dircanciones = d+"\ cantaciones;
        c = 1;

        fprintf("\n\t >> Archivos listos, presionar" + ...
            " Reproducir para iniciar: %s <<\n\n",c);
        [y,Fs] = audioread(dircanciones(c));
        player = audioplayer(y,Fs);

    catch
        clc
        disp("Error al cargar archivos de audio")
        disp("Los formatos disponibles son: " + ...
            ".wav .mp3 .mp4 .avi .wmv .m4v .ogg " + ...
            ".flac .au .aiff, .aif .aifc .m4a, .mp4")
    end
    stop(player)
    % PlayButtonPushed(app, event)
end
end

% Component initialization

```

```
methods (Access = private)
```

```
% Create UIFigure and components
```

```
function createComponents(app)
```

```
% Create UIFigure and hide until all components are created
```

```
app.UIFigure = uifigure('Visible', 'off');
```

```
app.UIFigure.Position = [100 100 523 290];
```

```
app.UIFigure.Name = 'MATLAB App';
```

```
% Create Image
```

```
app.Image = uiimage(app.UIFigure);
```

```
app.Image.ImageClickedFcn = createCallbackFcn(app, @ImageClicked, true);
```

```
app.Image.Position = [395 150 111 118];
```

```
app.Image.ImageSource = 'rabbit.png';
```

```
% Create DetenerButton
```

```
app.DetenerButton = uibutton(app.UIFigure, 'push');
```

```
app.DetenerButton.ButtonPushedFcn = createCallbackFcn(app, @DetenerButtonPushed, true);
```

```
app.DetenerButton.Position = [251 225 100 22];
```

```
app.DetenerButton.Text = 'Detener';
```

```
% Create ControlesdeaudioButtonGroup
```

```
app.ControlesdeaudioButtonGroup = uibuttongroup(app.UIFigure);
```

```
app.ControlesdeaudioButtonGroup.SelectionChangedFcn = createCallbackFcn(app, @ControlesdeaudioButtonGroupSelectionChanged, true);
```

```
app.ControlesdeaudioButtonGroup.Title = 'Controles de audio';
```

```
app.ControlesdeaudioButtonGroup.Position = [43 36 328 154];
```

```
% Create PlayButton
```

```
app.PlayButton = uibutton(app.ControlesdeaudioButtonGroup, 'push');
```

```
app.PlayButton.ButtonPushedFcn = createCallbackFcn(app, @PlayButtonPushed, true);
```

```
app.PlayButton.Position = [127 77 74 22];
```

```
app.PlayButton.Text = 'Play';
```

```
% Create PausaButton
```

```
app.PausaButton = uibutton(app.ControlesdeaudioButtonGroup, 'push');
```

```
app.PausaButton.ButtonPushedFcn = createCallbackFcn(app, @PausaButtonPushed, true);
```

```
app.PausaButton.Position = [127 35 73 22];
```

```
app.PausaButton.Text = 'Pausa';
```

```
% Create SiguienteButton
```

```
app.SiguienteButton = uibutton(app.ControlesdeaudioButtonGroup, 'push');
```

```
app.SiguienteButton.ButtonPushedFcn = createCallbackFcn(app, @SiguienteButtonPushed, true);
```

```
app.SiguienteButton.Position = [221 56 74 22];
```

```
app.SiguienteButton.Text = 'Siguiente';
```

```
% Create AnteriorButton
```

```
app.AnteriorButton = uibutton(app.ControlesdeaudioButtonGroup, 'push');
```

```
app.AnteriorButton.ButtonPushedFcn = createCallbackFcn(app, @AnteriorButtonPushed, true);
```

```
app.AnteriorButton.Position = [26 56 74 22];
```

```
app.AnteriorButton.Text = 'Anterior';
```

```
% Create CargararchivosButton
```

```
app.CargararchivosButton = uibutton(app.UIFigure, 'push');
```

```

app.CargararchivosButton.ButtonPushedFcn = createCallbackFcn(app, @CargararchivosBu
app.CargararchivosButton.Position = [43 208 100 22];
app.CargararchivosButton.Text = 'Cargar archivos';

% Create CargarcarpetaButton
app.CargarcarpetaButton = uibutton(app.UIFigure, 'push');
app.CargarcarpetaButton.ButtonPushedFcn = createCallbackFcn(app, @CargarcarpetaButt
app.CargarcarpetaButton.Position = [43 246 100 22];
app.CargarcarpetaButton.Text = 'Cargar carpeta';

% Show the figure after all components are created
app.UIFigure.Visible = 'on';
end
end

% App creation and deletion
methods (Access = public)

% Construct app
function app = ReproductorDeMusica

% Create UIFigure and components
createComponents(app)

% Register the app with App Designer
registerApp(app, app.UIFigure)

if nargin == 0
    clear app
end
end

% Code that executes before app deletion
function delete(app)

% Delete UIFigure when app is deleted
delete(app.UIFigure)
end
end
end

```

Esta App se encuentra en los siguientes link:

MathWorks: https://www.mathworks.com/matlabcentral/fileexchange/94265-reproductor-de-musica-music-player?s_tid=srchtitle

GitHub: <https://github.com/fabian-ss/Matlab-App/tree/main/ReproductorDeMusica>