Implement the SDR representation in the MAUI application

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*Abstract*— Due to the drastic demand of users in problems involving real-time solutions, Software developers have options for using sufficient frameworks. In the specification of the app user, a cross-platform framework, .NET Multi-platform App User Interface (.NET MAUI), is a good choice for developers to implement their models compatibly on multiple devices with less work. Besides, a separation in MAUI structure of visualization and functions provides better keeping up with the app development. This paper shows the creation of a .NET MAUI app to interact with users via User Interface (UI). The structure of vital iterations in generating the MAUI app is specified. The purpose is to replace the current Sparse Distributed Representation (SDR) visualization with a simpler and more efficient tool, the new library for SDR drawing implemented using Maui.Graphics.

Keywords—MAUI, Maui.Graphics, User Interface (UI), cross-platform APIs, Data Binding, XAML, Model-View-ViewModel, Sparse Distributed Representation (SDR)

# Intro (*Heading 1*)

See also: <https://en.wikipedia.org/wiki/IMRAD>

This Section should be focused on describing your approach. You can use references from other source.

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# Discussion

Conclusion of your work should be precise and concise. How was the project, what is done, what is the result... There can be discussion on further work and direction.

# Ease of Use

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*a**b* 

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## Some Common Mistakes

* The word “data” is plural, not singular.
* The subscript for the permeability of vacuum **0, and other common scientific constants, is zero with subscript formatting, not a lowercase letter “o”.
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1. Table Type Styles

| Table Head | Table Column Head | | |
| --- | --- | --- | --- |
| Table column subhead | Subhead | Subhead |
| copy | More table copya |  |  |

1. Sample of a Table footnote. (*Table footnote*)



Figure 1 Example Figure Caption

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Referencing Code in your text should be avoided unless necessary. In such cases it can be inserted as a listing as shown in **Error! Reference source not found.**

Listing 1 Code Reference Example

Console.WriteLine(“Referencing code”, var);

// using tab can be replaced with 4 spaces

Do not pass code as image. When referring to variable in **Error! Reference source not found.**, italics should be used for example *var.* Code flows and logic should be presented better as Graph or Diagram instead of words.

Code Block which is too big to put in the textbox can be reference as Listing 2.

Listing 2 Unit Test [EncodeDateTimeTest](https://github.com/ddobric/neocortexapi/blob/0348ffb99739ddf8c8c3a875f8162a18073938ca/source/UnitTestsProject/EncoderTests/DateTimeEncoderExperimentalTests.cs#L34-L49)

public void EncodeDateTimeTest(int w, double r, …)

{

…

DateTimeEncoderExperimental encoder = new…

var result = encoder.Encode(input);

…

Assert.IsTrue(result.SequenceEqual(expected…

}

##### Acknowledgment *(Heading 5)*

The preferred spelling of the word “acknowledgment” in America is without an “e” after the “g”. Avoid the stilted expression “one of us (R. B. G.) thanks ...”. Instead, try “R. B. G. thanks...”. Put sponsor acknowledgments in the unnumbered footnote on the first page.

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5. R. Nicole, “Title of paper with only first word capitalized,” J. Name Stand. Abbrev., in press.
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