

MonoGame is a popular cross-platform open-source framework used for developing games and other graphical applications. However, this framework has no out-of-box support for user interface creation. And while there exist many third party UI libraries, none of them has the goal of implementing some existing, widely used user interface framework.

For this thesis, we decided to target this shortcoming and reimplement the Windows Presentation Foundation framework, in form of a library, to MonoGame. As part of this work, we chosen a viable feature subset that is going to be implemented and solved many technical issues. Issues like how to render our graphical primitives or how to implement a non-rectangular clipping. The emphasis of the thesis was to follow the well-known WPF API and its behavior during the implementation process as closely as possible.