



# CodeRage 2019



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## A FireMonkey “Blur Behind” control

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# Overview

- We are going to create a small control that blurs whatever is behind it
- It uses TControl.PaintTo to render the parent control to an off-screen bitmap
- Followed by a GPU accelerated TGaussianBlurEffect to blur part of the bitmap
- And finally draws the blurred bitmap to the canvas of the control

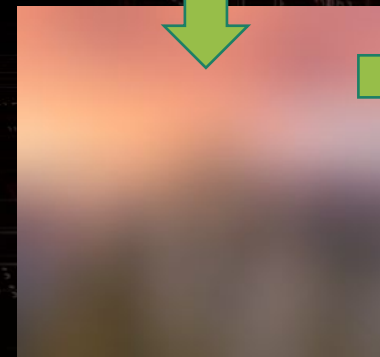
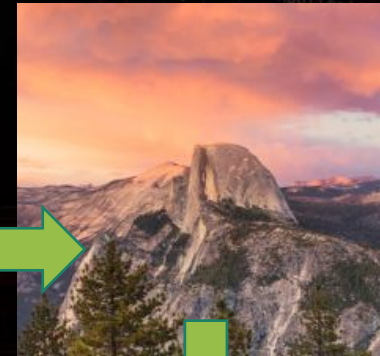
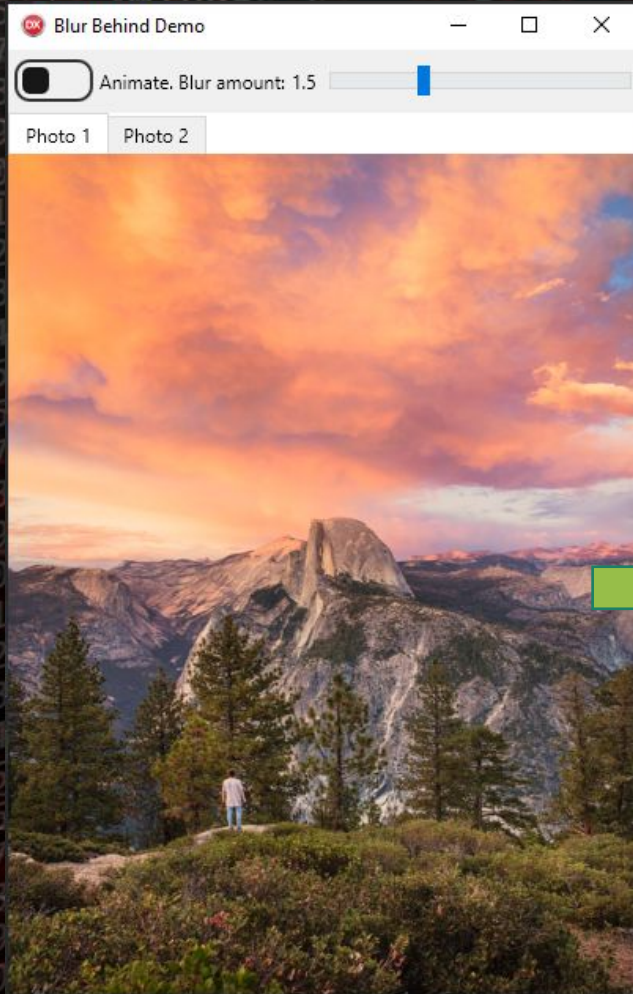


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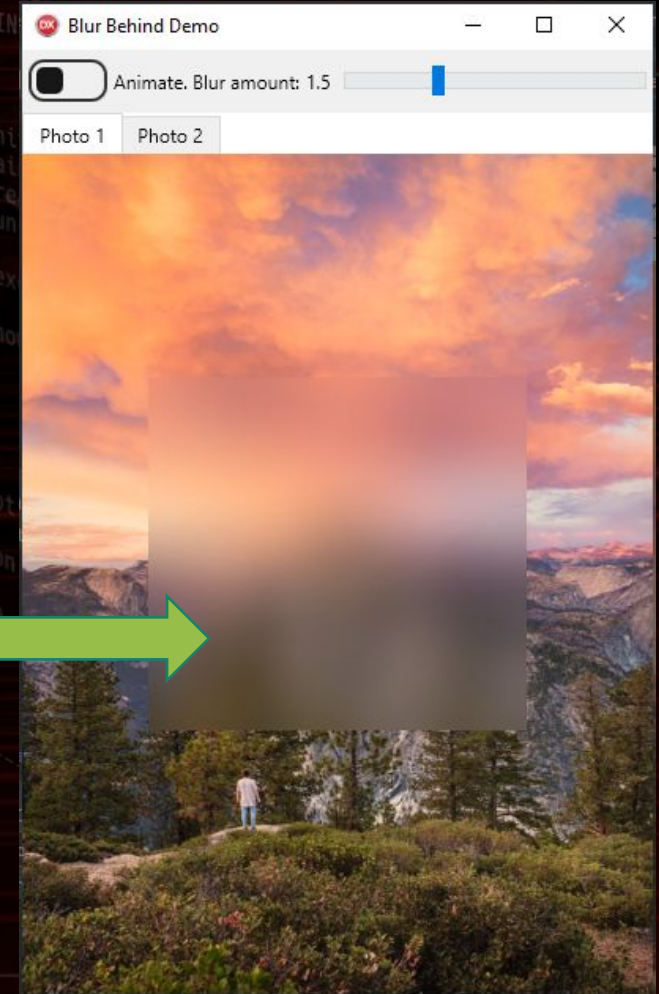


# Process

## 2. Copy Region Of Interest to separate bitmap



## 3. Blur bitmap

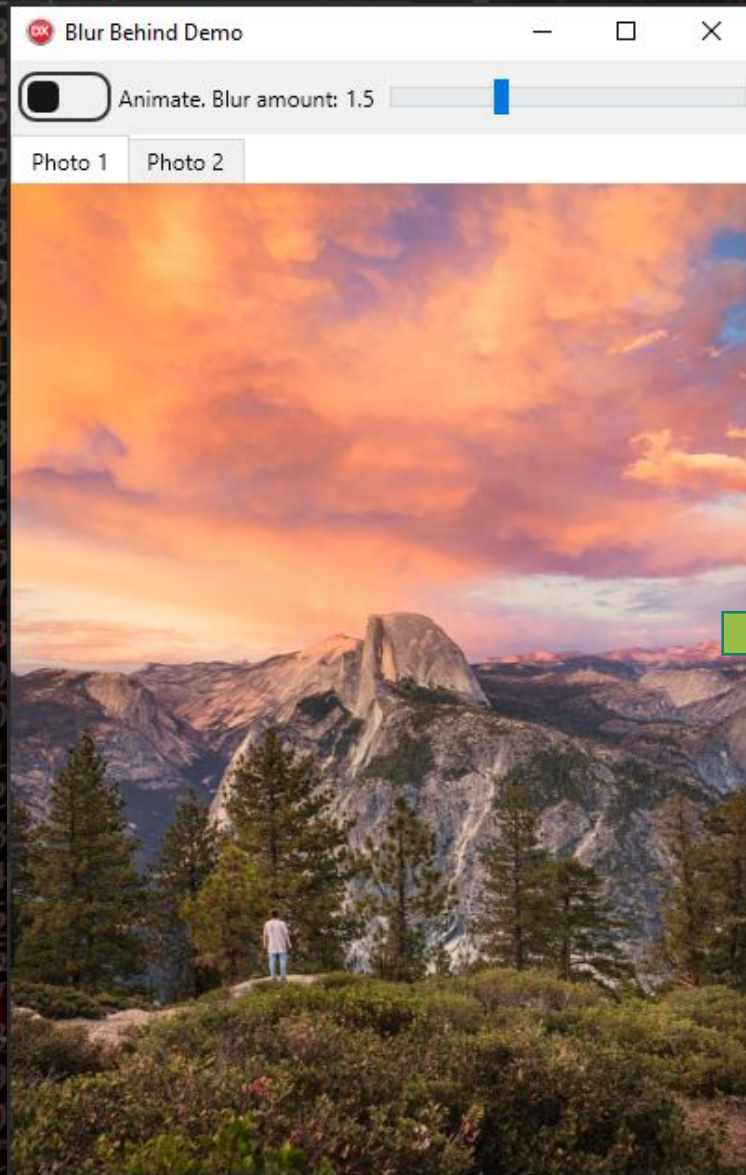


## 4. Draw bitmap to control

## 1. Draw parent control to off-screen bitmap



# Optimizations

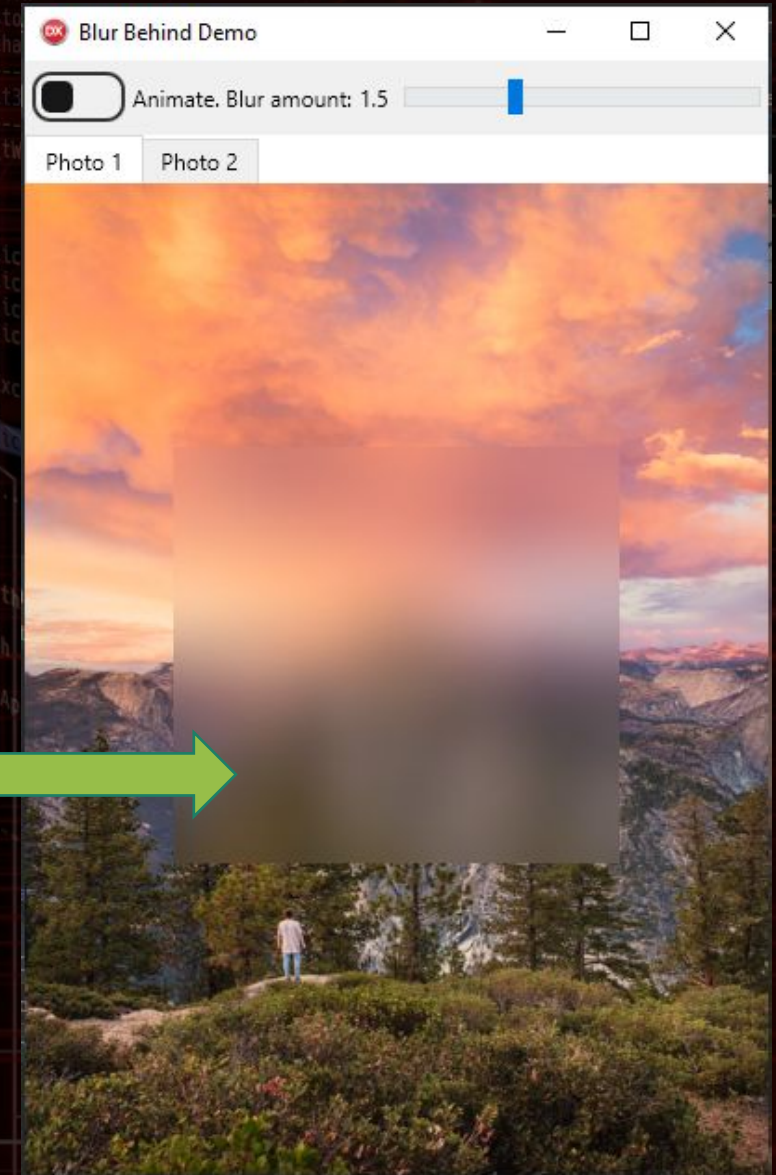
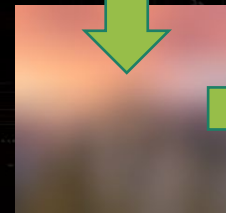


1. Draw parent control to reduced-size off-screen bitmap

2. Copy Region Of Interest (reduced) to separate bitmap



3. Blur bitmap



4. Draw and stretch bitmap to control





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## More Information

The code:

- [github.com/grijjy/CodeRage2019](https://github.com/grijjy/CodeRage2019)

Our blog:

- [blog.grijjy.com](http://blog.grijjy.com)

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