

DEEPZOOM ZERMATT

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THE PROJECT

- ❖ What to do if you are bored?
 - Stay in the office & browse the internet
 - Or 3 days in one of the best location in Switzerland



The solution

DEMO

DEMO

THE BUDGET

- ❖ Planned 3 days (+ nights) of work time
After the first demo I got 3 weeks of additional time 😊
- ❖ 1'000 Euro budget for HW & travel

THE RESULT

- ❖ Will be published
 - as a top story on MSN Switzerland this week
 - on MySwitzerland.com and Zermatt.com
- ❖ Multiple touch kiosks around Switzerland

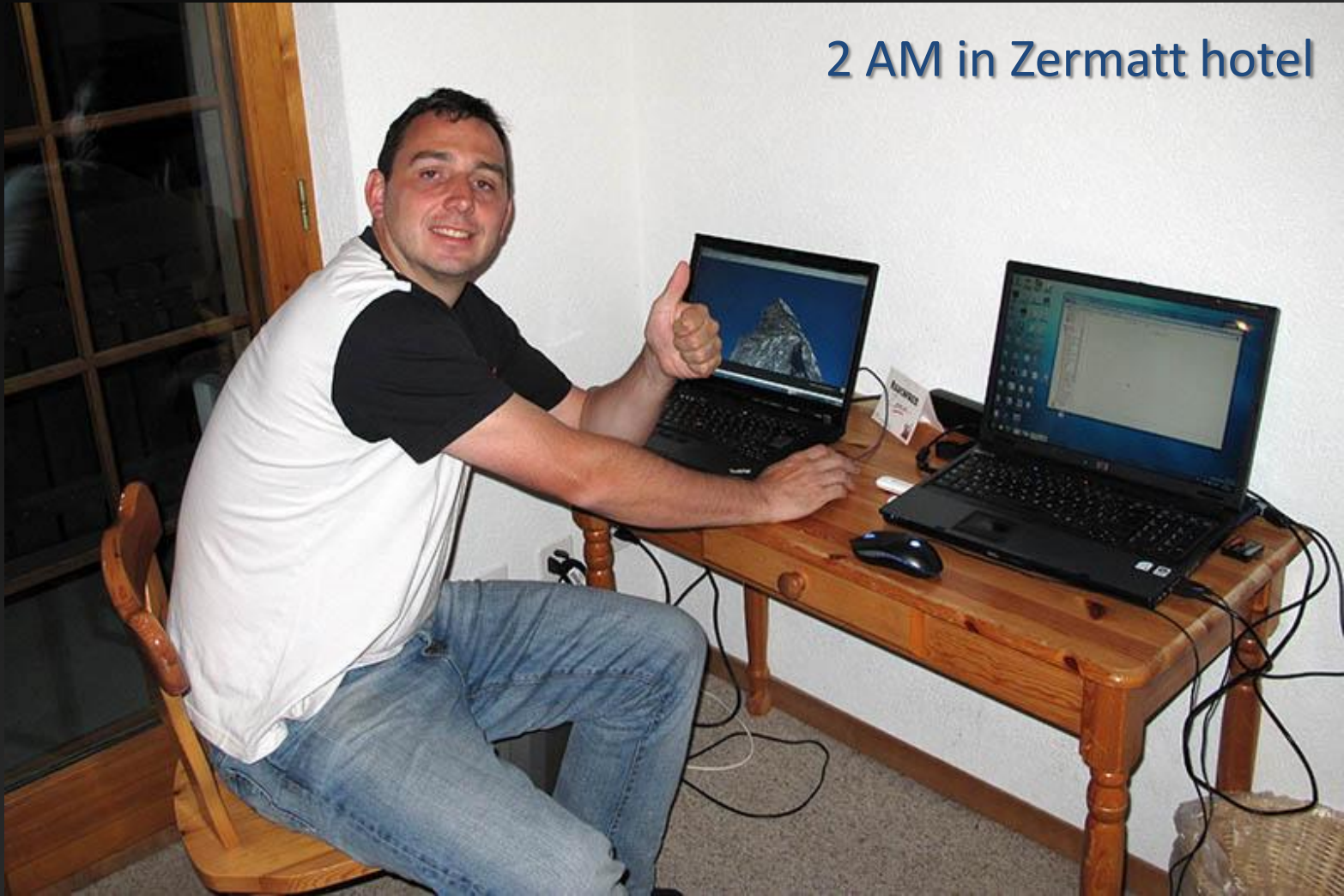


SOME DATA

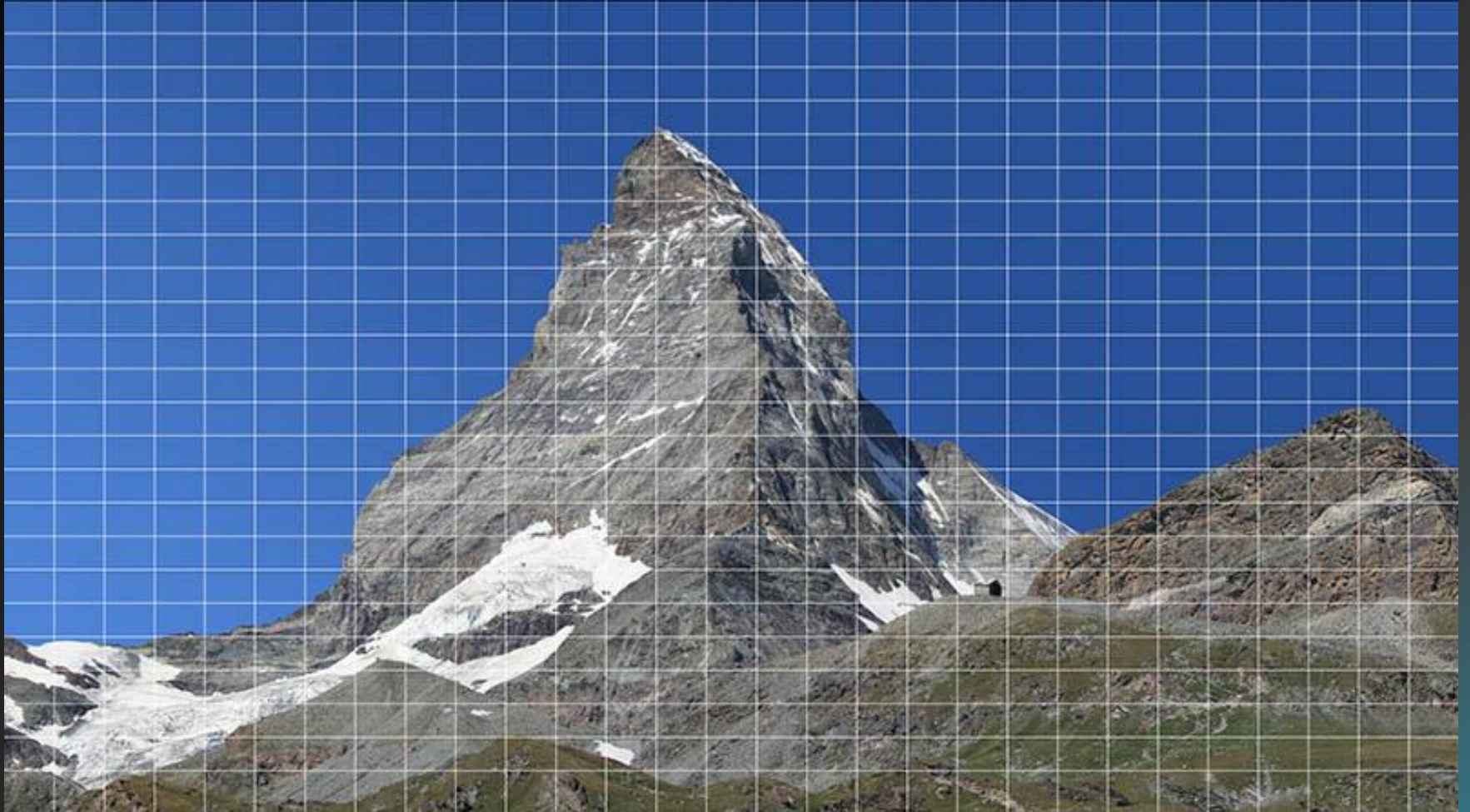
- ❖ 60 GB of photos
- ❖ Largest photo:
 - 440 photos x 21 Megapixel
 - Total unstitched resolution: 9.240 Gigapixel
 - Final resolution: 55'569 x 30'064, 1.67 Gigapixel
 - Compressed Tiff: 4.7 GB
- ❖ > 40 hours of CPU processing for 8 photos

THE MAKING OF

2 AM in Zermatt hotel



PICTURE TAKING



EQUIPMENT

- ❖ Canon 5D MkII (21 Mpix)
- ❖ Canon 1D Mk III
- ❖ Canon 400mm DO F4 IS
- ❖ Canon 24-105mm F4 IS
- ❖ Canon 16-35mm F2.8
- ❖ 1.4 Teleconverter
- ❖ RRS Ball Head
- ❖ Carbon Fiber Tripod
- ❖ AutoMate Pano Robot
- ❖ Windows Mobile Phone
- ❖ Lenovo W500 Notebook



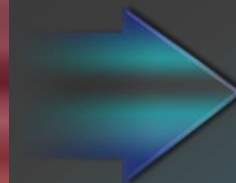
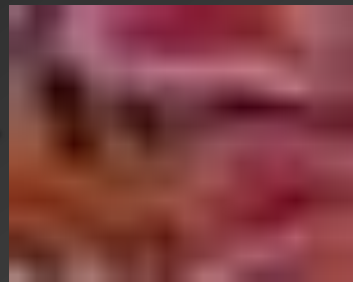
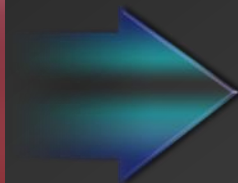
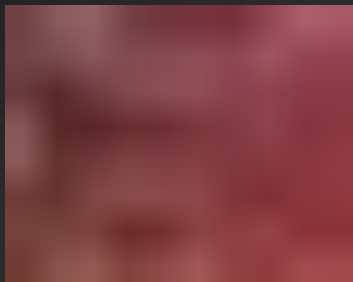
Pictures taking

DEMO

DEMO

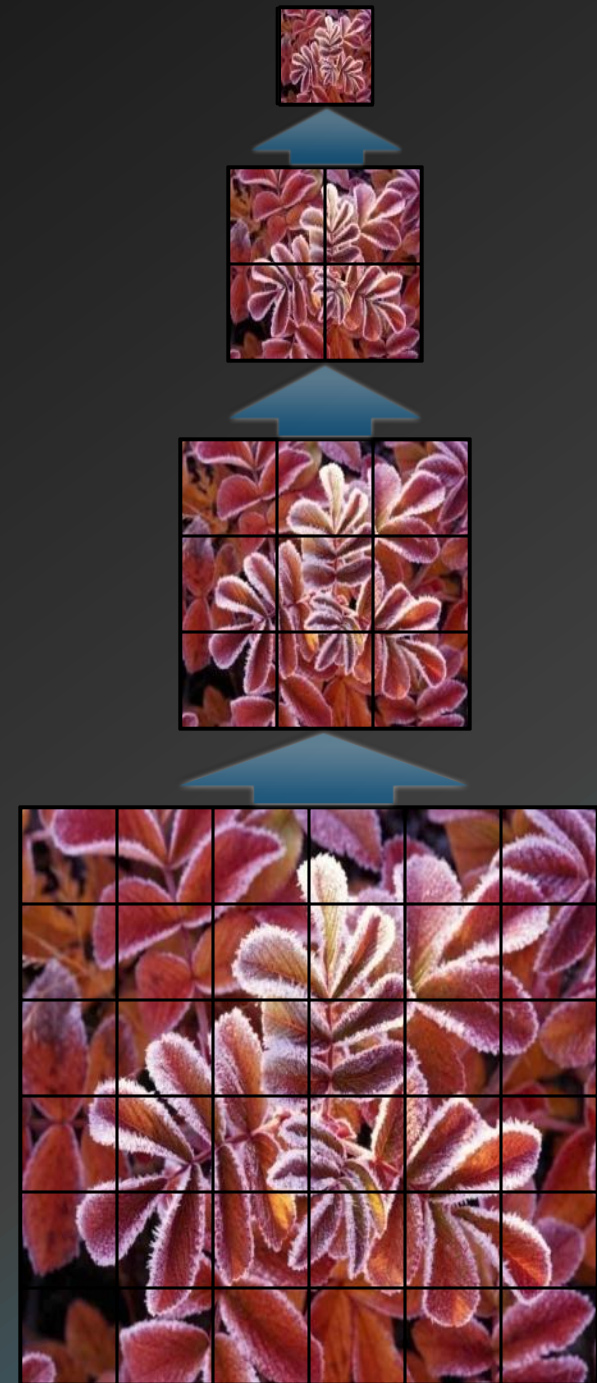
SILVERLIGHT DEEP ZOOM

- ❖ Provides seamless Viewing & Zooming of huge Images
- ❖ Loads only the data necessary to show the part of an image the user is viewing
- ❖ When the image is displayed on the client the lowest resolution tiles are shown first
- ❖ Then as the higher quality tiles are downloaded, they are smoothly blended in



DEEP ZOOM

- ❖ Deep Zoom tool breaks image into 256 x 256 tiles
- ❖ Then generates pyramids of tiles at lower resolutions
- ❖ Exposed through MultiScaleImage Control



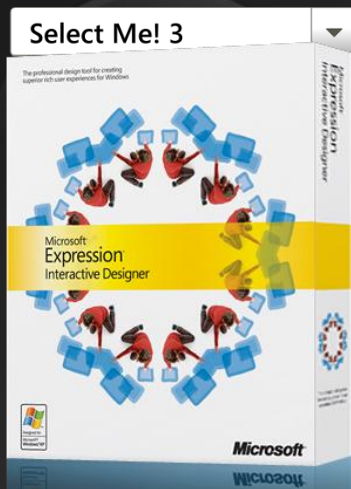
XAML & DESIGNER-DEVELOPER PRODUCTIVITY

DESIGNER



With XAML designers & developers can streamline their collaboration

DEVELOPER



Deepzoom

DEMO

DEMO

UI Creation

DEMO

DEMO

UI CUSTOMIZATION

❖ Customize the look of an application without changing it's behavior

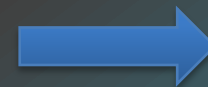
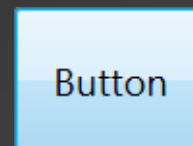
- **Styling** (Styles)

Small Visual Changes (Font, Background Color, etc.)



- **Skinning** (Control Templates)

Replacing Element's entire Visual



Styles & Templates

DEMO

The word 'DEMO' is rendered in a large, blue, 3D-style font with a slight glow. Below the text is a dark, semi-transparent reflection of the word, creating a sense of depth. The background is a dark gradient that transitions from black at the top to a teal color at the bottom.

NEW SILVERLIGHT 3 FEATURES

- ❖ On Windows 7
 - Multi-touch
- ❖ HW Acceleration, 720p & 1080p HD video playback
- ❖ Out of Browser Experience

Multitouch, OOB, HW acceleration

DEMO

DEMO

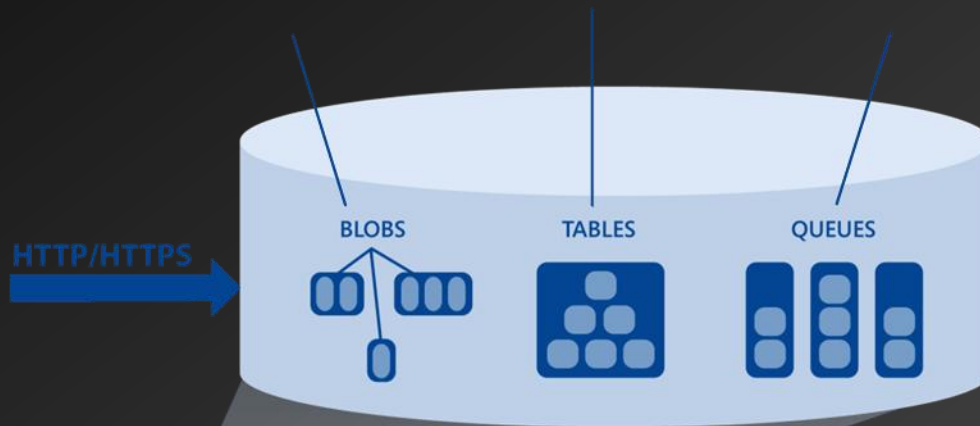
STORAGE IN WINDOWS AZURE

SCALABLE, DURABLE STORAGE

Blobs: large, unstructured data (audio, video, etc)

Tables: simply structured data, accessed using ADO.NET Data Services

Queues: serially accessed messages or requests, allowing web-roles and worker-roles to interact



WINDOWS AZURE PRICING METERS

COMPUTE

- ▶ Virtual Machine instances
- ▶ Load balancers, routers, etc.
- ▶ Automated service management

PRICE

- ▶ \$0.12 / hour

STORAGE

- ▶ Blob Storage
- ▶ Table Storage
- ▶ Multiple replicas

PRICE

- ▶ \$0.15 / GB stored / month
- ▶ Storage transactions:
\$0.01 / 10k

BANDWIDTH

- ▶ Ingress/Egress
(to/from internet only)

PRICE

- ▶ Bandwidth: \$0.10 IN; \$0.15
OUT; / GB

TOOLS USED

- Microsoft Research ICE
- Microsoft Research Hdmake PS plug-in
- Microsoft Expression Studio 3
 - Blend
 - Design
- Microsoft Visual Studio 2008
- Adobe Photoshop CS4 64bit
- Windows 7 64bit
- Microsoft Silverlight 3

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