



Celebriio

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Students' project

Team of undergraduate students



Web operating system

Goals >

- To create a operating system desktop using purely web technology
- To run both on-premises and in cloud
- To support various RDBMSs and storages
- To divide system Kernel and desktop interface

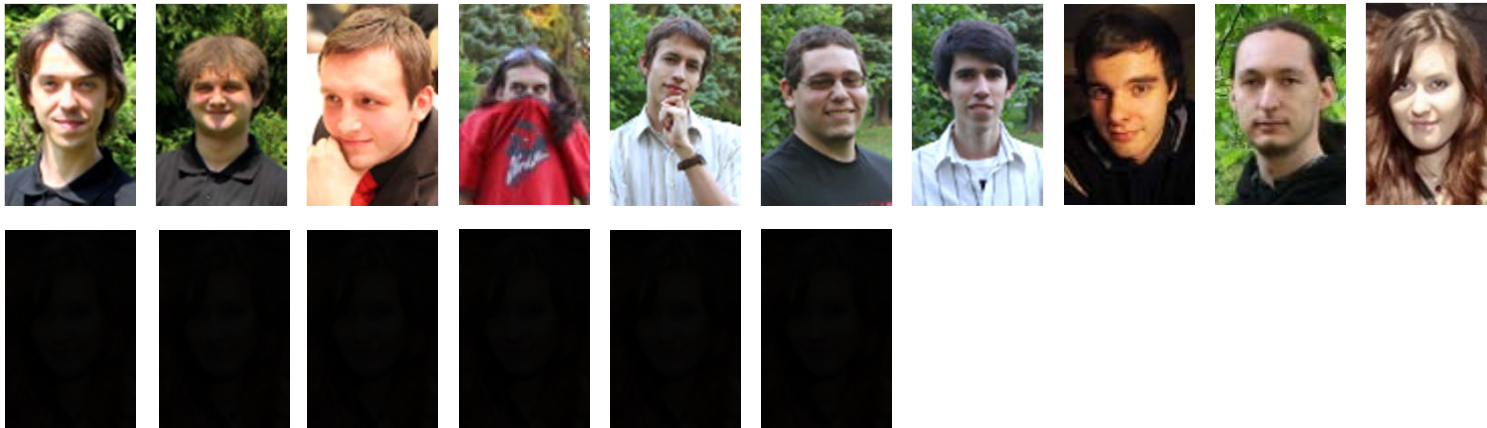
Not just research!



Celebrio

**Celebrio is a smart computer for the elderly
that would allow even my grandmother
to master the internet in no time
with no setting up and on-line support.**

Celebrio Software



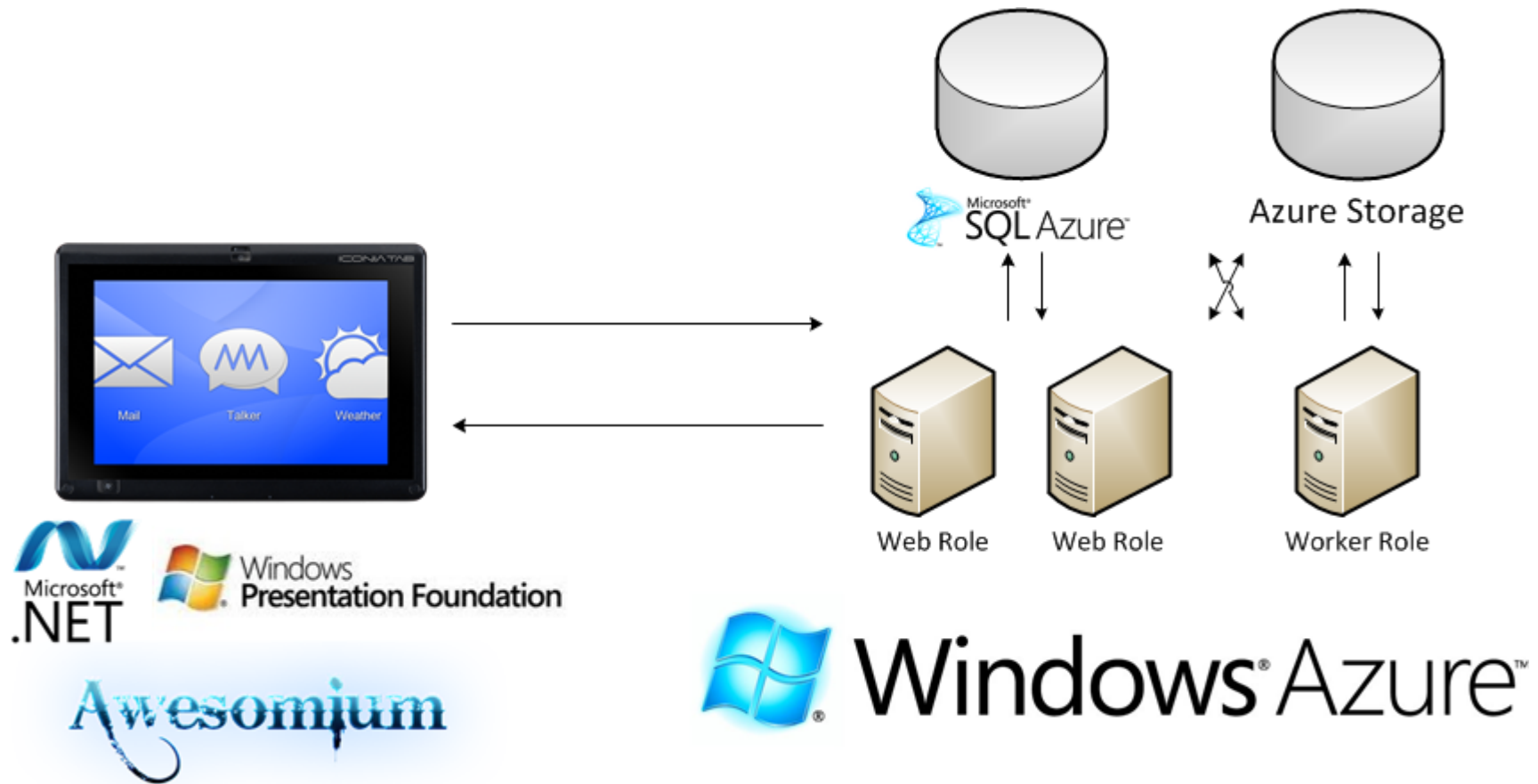
Celebrio Computer



Challenge of web technology

- **Web technology gives advantage of fast development and full control over the graphics.**
- **It is possible to use virtual tasks for applications and manage them.**
- **There is limitation in browsers creating need of own client with off-line support.**

Cloud Computing – Windows Azure



Client Architecture



Connecting to the Celebrio system web service and adding a lot of candy

Making the rendered web graphics responsive, connecting with web plugins and DHTML effects

Framework providing Webkit core for rendering graphics and processing web code

.NET Framework, C# and Windows Presentation Foundation as the basic technology

Web Role Architecture



User interface optimized for the elderly and handicapped users

Technology and libraries creating the basic tools and environment for the Celebrio system

Our modular technology supporting various server, storage and database environments

Build for Windows Azure distributed environment fully supporting multiple dynamic roles creation.

Using PHP 5.3 nette Framework.

Worker Role Architecture



Worker role providing automated support and maintenance (guest users cleaning, web role dynamic creation etc.)

.NET Framework and C# for Windows Azure

Virtual File System

- To use any storage anywhere through one API
- Using REST calls (<http://server/vfs/file/open>)
- Using RDBMS for metadata
- Local, Azure, Google...
- More secure

Success





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