Cloudster
Software Engineering: handling tools, working together

Guillaume Seguin
1. Contributing
   - Non-code contributions
   - Code contributions

2. Working together
   - Geeks
   - Team coding

3. Project overview
   - Technical point of view
   - Successes
   - Failures
Non-code contributions

- Continuous integration (with journu): CruiseControl.NET, MSBuild, SandCastle, fixing/working around various build bugs.
- SourceForge.net project management (setup, mailing lists, releases).
- External communication (Azure forums, Steve Marx).
- Internal communication (pinging people, helping them on parts of their work, checking that scheduled work is late).
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Code contributions to Cloudster

- Improve table handling by not deleting tables but doing a "create or clear". This should fix some bad race conditions created by Azure storages internal lag
- Improve EntityClusterTables table name resolution (use settings)
- Improve Vector2DSettings by checking whether role manager is running, and update callers accordingly
- Test Role through TestSequentialKMeansAndEnergyEvaluatorWithAzureStorage
- Finalize WebHelpers => Helpers renaming. Fix remaining problems and kill FxCop warnings. Update Cloudster.FxCop.
- Really kill WebHelpers directory
- Rename WebHelpers to Helpers, update web role pages accordingly
- Move BuildWebhelper to BuildHelper class and improve it to not use TextWriter
- Reworked creation bits of EntityStorage. Drop CreateBlobContainer, DoesContainEntity, ListEntities, CleanNonReal. Add CreateOrClearBlobContainer and use it.
- Added a beautiful <br /> in tasks controller pages between status label and buttons
- Reworked SequentialKMeans tests in Vector2D sample tests (factorize, cleanup...)
- Several others improvements
- Display a success message at the end of the build process in WebHelpers
- Enable errors display in Vector2D/WebRole/Web.config
- Make running initialization process (from web interface) impossible while WorkersCanWork flag is on

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Code contributions: summary

- Sequential $k$-means algorithm, initial testing tool
- Core work on abstracting data access for testing purposes
- Core fixes on table and blob storages handling
- Web interfaces
- Gist.NET image vectorization library
- Unit tests, code coverage, FxCop warning serial killing
- Code documentation
- Dropped HelloWorld
Working together
LASTMINUTE.COM

Will be committed tonight!

Almost done, only tests remaining
Great collaborations with jourgun and Tastalian

Team coding works best with 2 persons, 1 computer.

Letting others procrastinate work near you is **bad** for your productivity
Technical point of view

- Mostly successful (it works!)
- Code pretty well tested and covered
- Though: huge overhead for mostly simple computations
- Problem: what would potential users actually do with Cloudster?
Successes

- Team success: once again, it works!
- Personal success: after weeks of laziness, had a lot of fun on the project, learnt to love C# and .NET tools
- Personal success: basically every part of the project (code, samples, unit tests, documentation, website) is there and well made
Failures

- Personnal failure : remember this?

- DNA Sample : took 3 months before reassigning this project to someone else

- Image Sample : communication problem : started 1 week before the end of the project, quantically works in the release...
Thanks!