

Teaching Experiences

The Jump in Water approach

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Jump in Water to Learn Swimming

- Final year (they all believe they know 00)
- Active, Wiki based, choose the dialect (VW or Squeak)
- Not one teacher talking, students sleeping
- Project-based
 - Code what you want approach
 - But do it well
- Clearly difficult
 - Identify good students
 - Sloopy have bad grades, good have good grades

Projects List

- [Constraint solver](#) - Andreas Hosbach, Thomas Staub
- [HTML link checkers](#) - Oliver Aeberhard, Michel Neuhaus
- [HTML scriptor](#) - Beat Halter, Vivian Kilchherr
- [LegoMindstorm](#) - Christian Käser, Daniel Kilchhofer
- [Net Robot](#) - Stefan Reichhart, Lukas Renggli, Adrian Lienhard
- [Prosa Generator](#) - Mauricio Seeberger, Susanne Wenger
- [Breakout](#) - Andreas Dannecker
- [Tools for Instance Analysis](#) - Florian Brunner, Adrian Kuhn
- [Enhancing Swiki Project](#) - Tobias Aebi
- [A ftp client](#) - Ruedi Blattner, Patrik Schnellmann
- [Programmable Robot Environment](#) - Dave Wick, Nik Lutz

Wiki Based Communication

- Students should
 - Register
 - Follow milestone or they are dropped
- All communication is wiki based except lectures

Schedule

- | | | |
|----|------------|-------------------------------------|
| 1 | 05/04/2002 | Introduction (Squeak Demo) |
| 2 | 12/04/2002 | Fundamentals of Smalltalk (part I) |
| 3 | 19/04/2002 | Fundamentals of Smalltalk (part II) |
| 4 | 26/04/2002 | Labs |
| 5 | 03/05/2002 | Labs |
| 6 | 10/05/2002 | Check Point of the Projects |
| 7 | 17/05/2002 | Labs |
| 8 | 24/05/2002 | Labs |
| 9 | 31/05/2002 | Labs and Demo |
| 10 | 07/06/2002 | Advanced Design Part |
| 11 | 14/06/2002 | Labs |
| 12 | 21/06/2002 | Project Evaluation and Demo |

Milestone 1 19/4/2002

- Everybody should register in the [List of Participants](#) on this Wiki
- Everybody must have chosen a project from the list of [Possible Project Subjects](#)
- Everybody should have decided on which kind of hardware and software (i.e., which Smalltalk dialect) (s)he will do the project.
- Everybody who does not fulfill these requirements by 20:00 of the 19-04-2002 is out of the course

Milestone 2 3/5/2002

- Every project should be described in detail on the project's wiki page. The description should include the project's
 - name
 - its participants
 - the target platform
 - a short but precise description of the project itself,
 - a tentative roadmap
 - the references being used

Milestone 3 10/5/2002

- Every project must be presented during the lecture, using maximum 3 slides by its people
- The presentation includes:
 - A description of the project and a presentation of the group
 - Short term goals of the project
 - A roadmap for the project
 - References

Milestone 4 31/5/2002

This week we have again a Lab session (this time A94), but you'll also have to show off a little bit and give us three a demo of your current project. Also do update your Wiki (for those who didn't) with the necessary new information.

A new point will have to be included in your wiki page: A Deliverable, i.e., something which can be downloaded and used. In the simplest case it's just a .st-file, otherwise Parcels for VW5i. The week after that we'll probably have an "Advanced Theory Session" where on one hand you will be shown stuff like Smallint (powerful static code analyzer), the Refactoring Browser, as well as concepts like Unit Testing (SUnit), etc. We'll see. Regarding next Friday during the Demo also think in terms of explaining us what you did, i.e., can you explain us your "architecture"? From my experience transmitting to another person the architecture of a Software System is pretty darn hard, so this is a good and useful exercise for you.

Milestone 5: 21-06-2002 12:00

- Make a short (max 10 Minutes) presentation of your project.
- The presentation should include slides and a runnable demo. Present yourself, the project you did and "how" you did it. And finally, show off with what you did ;-)
- Finalize and clean your Swiki project page. Upload the latest (demoable) deliverable. The Swiki will be frozen after this milestone and rendered as static HTML. Burning a CD will all projects, the Swiki and the ST homepage is also something we could do, if people want that.

Talking about Design and OO

- Do not flatten you objects into string
- Visitor and simple patterns
- Refactoring browser, SmallLint
- Talk to your objects

What Could Have Been Done

- Check before and after they knowledge
- Peer code review
- Avoid graphical framework based project
 - VW is too much to learn
- Net related pose less problem
 - No interface
 - SeaSide and Comanche are good for that