

# Seaside

Dynamic Web Application Development  
through Object-Orientation

# Roadmap

- History
- Features
- Live Coding
- Seaside Today
- Discussion

# History

- State of Web application development:
  - Server side or client side?
  - Many people were blocking javascript by default
    - Web Apps had to be server side
  - User-readable URLs were not a must
- Ajax did not exist until 2005 (kickoff for Javascripts popularity)

# History

- Avi Bryant wanted to build interactive Squeak Wiki
- First Release 0.9 in February 2002 by Avi Bryant & Julian Fitzell, Open Source with MIT License
- Inspired by Apple's WebObjects (Objective-C)
- Quick development, version 2.0 came October 2003
- Very modern: Interactive date picker

# Seaside

- Web Framework for Smalltalk (Squeak, Pharo, Gemstone, etc.)
  - Purely Object Oriented
  - Works through Model View Controller
  - no pages: UI is a tree of individual, stateful and reusable component objects
- GLASS Stack:
  - [GemStone](#) (database and application server)
  - [Linux](#) (operating system)
  - [Apache](#) (web server)
  - [Seaside](#) (web framework)
  - [Smalltalk](#) (programming language)

# Features

- Incredibly flexible developer tools:
  - Live debugging and code changing while user interacts with web app
  - debugger in browser (tobi nach Einstellung fragen)
  - no HTML, render page as Morph -> no browser needed
  - Reusable *components*
- hides synchronicity -> no callback hell
- CSS, Ajax, Comet & Javascript support
- Session for each user

# ABLELINK'S Online Task Player

Changing lives with Cognitive Support Technologies

Root >> Desktop Solutions

## Main Menu

- Categories
- Search
- Unreviewed
- Users
- Settings
- Logout

## Web Trek Connect



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## Job Quest



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## Discovery Desktop



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## Search Tags

Desktop Job  
Quest Skills  
Trek Task Web

## Web Trek



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## Comp Skills



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## AIMS Task Builder



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Components



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# Live Coding

# Downsides

- Each session object can be multiple megabytes big
- If server crashes, all sessions are lost
  - Gemstone distributed but expensive
- Javascript not easily debuggable
- Very hard to implement human readable URLs
- Not on par with today's demands of a fast dynamic webpage since its server side

# Seaside Today

- Dabble DB was ‘killer app’ built by Avi Bryant himself
  - Was bought by twitter for real time analytics
- Still in use, example: *yesplan*
- Latest version 3.2 from May 2016
- Google Web Toolkit tried similar approach

# Dabble DB

- Database management and analytics without SQL
- purely visual and interactive

The screenshot displays the Dabble DB interface for a conference schedule. The top navigation bar includes links for Home, All Views, Import Data, Sharing, and Help. A search bar is present on the right. The main content area is divided into two panels: a list of sessions on the left and a calendar view on the right.

**Session List (Left Panel):**

- Unsaved View** (What is this?)
- 39 Entries**
- FILTER BY CATEGORY:** Session
- FILTER BY VALUE:** Keywords: perl
- Tip: Save your view** (If you want to be able to come back to this view later, click the view name link to save it with a name)
- Hide help**

**Session Details (Table):**

Room	Presenter Name	Summary
Columbia	Shane Warden	Intro to Perl Testing
Eugene	Marty Pauley	A Day of Extreme Programming
Eugene	Tim Bunce	Advanced DBI
Eugene	Phil Tomson	Ruby for Perl Programmers
Oregon Ballroom		States of the Union
Portland	Andy Lester	Automated Testing of Large Projects with Perl
Portland	Jeff Horwitz	extproc_perl: Embedding Perl in Oracle
Portland	Dave Rolsky	Industrial Strength Perl - Failing Predictably and Dealing With It
Portland	Merijn Broeren	One Perl to Bind Them All
Portland	Randal L. Schwartz	Writing about Perl - Observations and Guidelines

**Calendar View (Right Panel):**

July 2003

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
30	1	2	3	4	5
7	8	9	10	11	12
14	15	16	17	18	19

The calendar view shows sessions scheduled for each day of the month. For example, on Monday the 7th, sessions include 'Advanced DBI', 'Advanced PHP', 'Embracing and Extending RT', 'Building Data Warehouses with MySQL', 'Introduction to Python', and 'and 25 more'. On Tuesday the 8th, sessions include 'A Day of Extreme Programming', 'Advanced Object Oriented Perl', 'Building Data Warehouses with MySQL', 'Cross-Platform Packaging and Deployment with PAR', 'Enterprise Java Development on a Budget', and 'and 17 more'.

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# Discussion

- Why would people not use technologies such as Seaside or Google Web Toolkit?
- What do you think about it having such a monopoly, that people do not look for solutions anywhere else?