Easy Databases On Maemo

Part 1: Stop Writing Code
Part 2: Glom
Part 3: Handheld Glom
Part 1: Stop Writing Code

Developers are incredibly ineffective
Developers Are Difficult

- Argue about editors
- Argue about version control
- Argue about programming languages
- Argue about code style
- Argue about toolkits
- Argue about build tools
- Nice to have: Implement features
The Best Is Not Enough

- People say the best developers are 10 x more productive than other developers
- That's true
- That's still 1000 x not good enough
Please

Stop The Developers
Code

- Code crashes
- Code works but you don't know why
- Code does something but you don't know what
- Code stops working if you look at it.
100 Ways To Be Slightly Better

- Development methodologies
- Specifications
- IDEs
- New programming languages
- Regression Testing

After everything, code is still mostly awful.
Please

Stop Writing Code
Estimates Are Always Wrong

- Always 2 weeks until it's finished. Translation: "We have no idea".
- First month: Version 0.5, 0.6, 0.7, 0.8, 0.9
- Last two years: 0.91, 0.92 ... 0.9991 ... 0.9999, 2.0
- Requirements Always Change
Please

Stop Planning

Show useful results early. Move on.
Part 2: Glom

- Design database systems
- UI and structure together
- Self-contained in one folder
- For normal users
- No code. No SQL. (You can if you must)
Features (1)

- Simple field types
- Automatic layout
- Find
- Relationships:
  - Related records
  - Field lookups
  - Related fields
  - Drop-down choices
Anything that people would (ab)use Excel for.

- Order Taking and Invoicing
- Project Management
- Membership Databases
- Bookings, Reservations
- Film Production Management
Handheld Uses

Jobs without computers: People who work on their feet.

- Restaurant Orders
- Deliveries
- Stock Taking
- Warehouse Order Picking
- Garage Billing
- School Attendance
Tables and Fields

- Tables

- Fields
Layout: List

- Shows many records:
• Show more details for one record.
• Identify records based on a field value.
Using Relationships

• View related records
• View a related field
• Lookup a value from a related field
• Show list of possible values from a related record
No need for SQL

- This is pain:
  SELECT "invoices"."invoice_id", "invoices"."date", "invoices"."contact_id", "relationship_contacts"."name_full", "invoices"."price_total", "invoices"."vat_total", "invoices"."price_total_with_vat", "invoices"."comment", "invoices"."invoice_id" FROM "invoices" LEFT OUTER JOIN "contacts" AS "relationship_contacts" ON ("invoices"."contact_id" = "relationship_contacts"."contact_id") WHERE "invoices"."invoice_id" = 0

- Glom does it for you.
Extend via Python

- Define **Field calculations** using Python. To calculate a value based on other fields.
- Add a **button** that runs a Python script. To do something based on the field values, Use SQL if you like, via the provided pygda connection.
Extend via SQL

- Glom uses PostgreSQL or SQLite.
- So you can access the data directly, without even using Glom.
- Just don't use unusual features that Glom doesn't expect.
Extend via XML

- .glom files are XML.
- The format is obvious and documented.
- Libglom helps you to read the XML. Qlom (Qt) uses it. We have a Java JSP test too.
Part 3: Handheld Glom

- Client-only: Just viewing and Editing of data
- TouchSelector instead of TreeView
- PickerButton+TouchSelector instead of ComboBox
- Hide some labels
- Use single-columned layouts by default
- Use Hildon Buttons, Entries, Windows
- ifdeftastic
Simpler UI

List:

0. Bruce Springsteen
1. Madonna
2. Prince
3. Curtis Mayfield
4. Louis Armstrong
Simpler UI

Details:

Album ID: [3]
Name: Sign '0' The Times
Artist ID: [5] 5 Open Find
Name: fdf
Publisher ID: [1] 1 Open Find
Name: Warner Bros
Openismus GmbH

We Create Quality
We Fight Entropy