

## Deogrid

- Project summary:
  - [Deogrid.com](http://Deogrid.com) is a multi-user grid which uses Java WebSockets
  - Apps which control grid written in new programming language: Deoscript
  - Markup language called Deotags (ext: .DAPP, .DEOT)
  - Server-side code written in Deoscript
  - Users download the Deoscript Engine and visit localhost using a web browser
- Business model:
  - Apps are free or freemium
  - Freemium apps have an enforced conversion rate cap of 50 percent
  - Subscribers pay one annual fee of \$10 for premium access to every freemium app
  - Freemium app developers share profits in proportion to their Premium App User count
  - Transaction fees (5 percent) charged to app developers w/ server-side data
  - Transactions involving items (unless units are hours) capped at \$20/month/organization
  - E-commerce app has one organization per online store
- Grid description:
  - Each character is 2 cells: 2 rows x 1 column
  - Grid is subdivided into panels, recursively
  - Headers at top of panels are mono-spaced with a larger (bold) font size
  - Images: m rows x n columns (centered)
  - Buttons: colored underlined text, white background
  - Widgets: 2 rows x 2 columns (checkboxes, radio buttons, combobox arrows)
- Superscripts and subscripts:
  - Caret (^): toggle superscript/subscript
  - Backspace: disable current level of superscript/subscript
  - Tower of superscripts/subscripts is allowed, vertical offset 1 cell/level
  - Escape char. is slash (/): used for entering zero or more slashes followed by 1 caret
- Text cursor:
  - Swap foreground/background colors of current text cell
  - Hold mouse button down anywhere to highlight (flash) text cursor
  - Click to move text cursor
  - Drag off cursor to scroll
- Select command (click icon at upper left-hand corner):
  - Drag to highlight paragraph-style
  - Click text cursor once, then drag to highlight rectangular block
  - Click same icon while block selected for block-related commands
  - Click off cursor to access additional commands using same icon
- Dual mode: 2 users
- Group mode:
  - One leader, 2 or more clients
  - Leftmost 2 columns: first/last initials of clients
  - Leader clicks on initials to highlight
  - Client clicks on own initials to highlight
- Remote user:
  - Highlight (flash) text just entered
  - Highlight (flash) button clicked
  - Click and hold to highlight (flash) text cursor
  - Remote user (group mode) is leader or active client

- Circle mode:
  - Many users
  - Press Enter to toggle turn on/off
  - Escape char. is slash (/): enter zero or more slashes followed by Enter (hard return)
  - No superscripts/subscripts allowed

## Global Database

1. AppTab: Apps
  1. id: app
  2. entid
  3. isfree
  4. isservdata
2. UstrTab: Users
  1. id: usr
  2. entid
  3. isconv: converted
3. AppUstrTab
  1. appid
  2. usrid
  3. isconv: converted
4. CtyTab: Cities
  1. id: cty
  2. sptid
  3. cntid
5. SpTab: State/Province
  1. id: sptid
  2. cntid
  3. regid
  4. state
  5. statecode
6. CntTab: Countries
  1. id: cntid
  2. country
  3. countrycode
7. RegTab: Regions
  1. id: regid
  2. cntid
  3. region
8. WebTab: Websites
  1. id: web
  2. url
9. TxtTab: Blurbs
  1. id: txt
  2. text (256)

## App-Specific Database

1. OrgTab: Organizations
  1. id: org
  2. entid
  3. webid
2. ItmTab: Items
  1. id: itm
  2. entid
3. EntTab: Entities
  1. id: ent
  2. shortname (first)
  3. longname (last)
  4. clsid
  5. ctgid
  6. locid
  7. logid
  8. bal (price)
  9. active
  10. flags (32 bits)
  11. txtid
4. EvtTab: Events
  1. id: evt
  2. date
  3. time
  4. length
  5. untid
  6. cost
  7. iscalc
  8. cntid (currency typ)
  9. locid
  10. txtid
5. EvtDetlTab
  1. evtid
  2. sdtid (src-dest)
  3. reltyp
  4. qty
  5. untid
  6. rate
  7. cost
  8. txtid
6. UniTab: Units
  1. id: unt
  2. units

7. ClsTab: Classes/Categories

1. id: cls
2. shortname
3. longname
4. typ: O/U//A
5. isclass (class/catg)
6. txtid
7. max count = 128

8. RelTab: Relationships

1. id: rel
2. reltyp (1 - 9)
3. setsrcclass (128 bits)
4. setsrccatg (128 bits)
5. setdestclass (128 bits)
6. setdestcatg (128 bits)
7. isgraph (2-way)
8. txtid

9. OrgRelTab: Org-Org

1. id: ortid (sdtid)
2. srcrelid
3. destrelid
4. txtid

10. UsrRelTab: Usr-Usr

1. id: urtid (sdtid)
2. srcrelid
3. destrelid
4. txtid

11. ItmRelTab: Itm-Itm

1. id: irtid (sdtid)
2. srcrelid
3. destrelid
4. txtid

12. OrgUsrTab: Org-Usr

1. id: outid (sdtid)
2. srcrelid
3. destrelid
4. txtid

13. OrgItmTab: Org-Itm

1. id: oitid (sdtid)
2. srcrelid
3. destrelid
4. txtid

14. UsrItmTab: Usr-Itm

1. id: uitid (sdtid)
2. srcrelid
3. destrelid
4. txtid

15. LogTab: Login

1. id: log
2. email
3. username
4. password
5. phone
6. question
7. answer

16. LocTab: Locations

1. id: loc
2. room
3. floor
4. addr1
5. addr2
6. majorint
7. ctyid
8. txtid

## Keyword Database

1. BufTab

1. id: buf
2. entid
3. buf (256)
4. indexed text (like a search engine)
5. repetition: asterisk (\*)
6. format: (fld val)\*
7. esc: \
8. esc: \\

2. KwdTab: Keywords

1. id: kwd
2. text (16)

3. FldTab: Field Names

1. id: fld
2. name (16)

4. PhrTab: Phrases

1. fldid
2. kwdid
3. bufid
4. pos

5. KwcTab: Keyword Counts

1. fldid
2. bufid
3. count

6. FpTab: Field Pos Values

1. fldid
2. bufid
3. pos (0 - 255)

## Deogrid in a Nutshell

Here is a summary of my Deogrid project: it's a tool that you download which links tutors (mostly math tutors) with those needing instruction. It can also be used to build software and sell things online.

Pardon me for getting technical in this paragraph. The "secret sauce" of Deogrid has to do with a certain constraint acting on the software that you build with the Deogrid tool. That constraint involves the formatting of text: an intermediate format between mono-spaced (like a typewriter) and variable width (like a modern word processor or website). Each character takes up 2 square cells: an upper cell and a lower cell. So the screen presented to the end user is in the form of a grid, simplifying the software development process for the programmer (a Deogrid customer) using the tool to build software. Also the grid-oriented format enables math tutors and students to easily enter/edit math problems.

The Deo in Deogrid comes from DO + E, where the "do" keyword precedes every code block in Deoscript syntax, and E stands for Easter. I started my Deogrid project on Good Friday. Deoscript is the name of the built in scripting language bundled with Deogrid. Deogrid is my latest scheme to keep busy and perhaps even start a profitable business. In the past several months before Easter 2019 I haven't been keeping busy enough which is bad for my mental health.

## Implementation Steps

1. Develop Deoscript 0.1
2. Learn how to do unit testing
3. Develop Deoscript 1.0
4. Write Deotags design specs
5. Learn WebSocket programming
6. Develop WebSocket deogrid
7. Integrate deogrid with Deoscript
8. Make deogrid multi-user
9. Implement database functionality
10. Develop [Coophoria](#) app (tutors) in Deoscript
11. Develop website
12. Approach Progress Place
13. Beta test Deogrid
14. Finish website
15. Develop Deoscript code editor
16. Develop Deotags WYSIWYG editor
17. Approach West Neighbourhood House
18. Recruit other clubhouses
19. Implement financial transactions
20. Recruit CEO
21. Advertise for tutors/clients
22. Advertise for agencies and nonprofits
23. Recruit coders and authors to write lessons
24. Make website scalable
25. Implement internationalization

## About Me

I am Mike Hahn, the founder of Deogrid.com. I was previously employed at [Brooklyn Computer Systems](#) as a Delphi Programmer and a Technical Writer (I worked there between 1996 and 2013). At the end of 2014 I quit my job as a volunteer tutor at [Fred Victor](#) on Tuesday afternoons, where for 5 years I taught math, computers, and literacy. I'm now a volunteer math/computer tutor at [West Neighbourhood House](#). My hobbies are reading quora.com questions/answers and the news at cbc.ca. About twice a year I get together with my sister Cathy who lives in Victoria. She comes here or I go out there usually in the summer. A few months prior to starting my Deogrid project I used to lie on the couch a lot, not being very active. Now I'm busy most of the time. I visit my brother Dave once a month or so and I also visit my friends Main and Steph once or twice a month. For 26 years I was depressed on and off (I'm a rapid cyclor), but it largely vanished after I started my Deogrid project.

## Contact Info

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