Let's improve the world!

declarative modeling for the masses

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creating worlds

- vision, dream, project...

- time...

creating <u>virtual</u> worlds

- vision, dream, project…

- months of meticulous work and manual fine-tuning

designers and artists

how to help them specify that vision?
how to facilitate that creation process?

Enable MANY more dreams to become reality!

declarative modeling of virtual worlds

- enable designers of virtual worlds to concentrate
  on stating **what** they want to create,
  instead of on describing **how** they should model it

- combine the integrated use of procedural modeling
  techniques with a semantically-rich model of virtual objects

- more effectively capture designer's intent:
  - throughout the design process
  - while using the virtual world

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challenge 1 - *quantity*

- huge amount of content to create
- many nice techniques, but mostly standalone
- lack of assistance to support that creation

controlled automation (a.k.a. procedural sketching)

- integrate a variety of procedural techniques
- act as an amplifier for designers' creative skills
- provide an intuitive and familiar interaction paradigm

SketchaWorld

- suitable for modeling complete virtual worlds
- developed with designers and artists in the loop
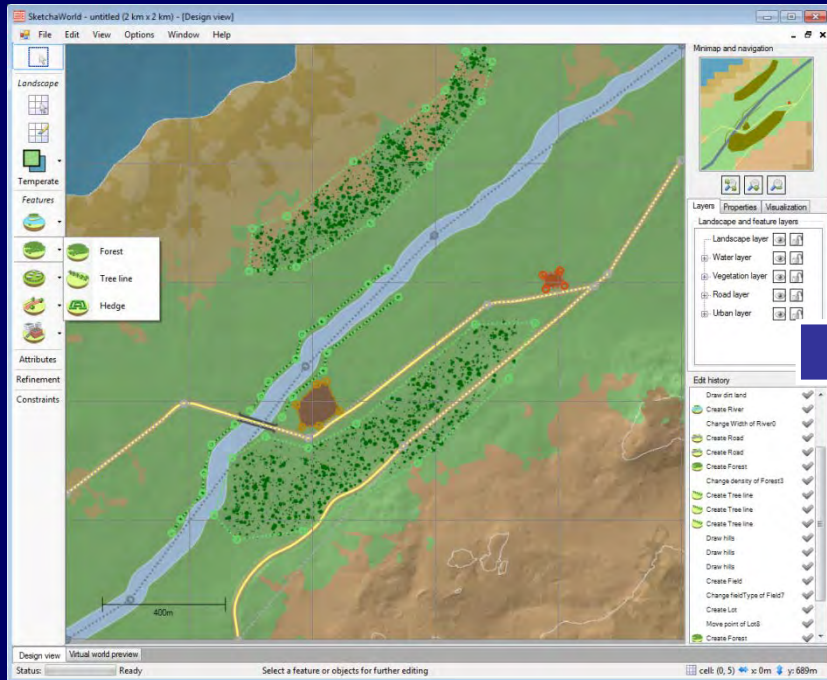
www.sketchaWorld.com

challenge 2 - *quality*

- virtual objects are (mostly…) not what they appear to be…
- …want more? hard-code it all! everywhere! …again!
- lack of assistance to support that customization

meaningful objects (a.k.a. semantics)

- embed all objects with useful, richer information:
    - behavior, functionality
    - roles, services
    - relationships with other objects
- make all that <u>reusable</u> and '<u>tweakable</u>'!

houses & stuff…

flavoring scenes (with procedural filters)

Tim Tutenel et al.

flavoring scenes (with procedural filters)

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Let's improve the world…

…behind the dikes!

Matthijs Schaap

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(just a few) challenges ahead

- offer more expressive power to input design intent

- provide more intuitive and fine control over the output

- better support iterative nature of design

- deploying richer semantics in virtual objects

- effectively help cope with complexity in the virtual world

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Let's continue improving the world!

Thanks!