Fabbit

Fabrication and Brokering through Information Technology

Björn Hartmann (EECS)
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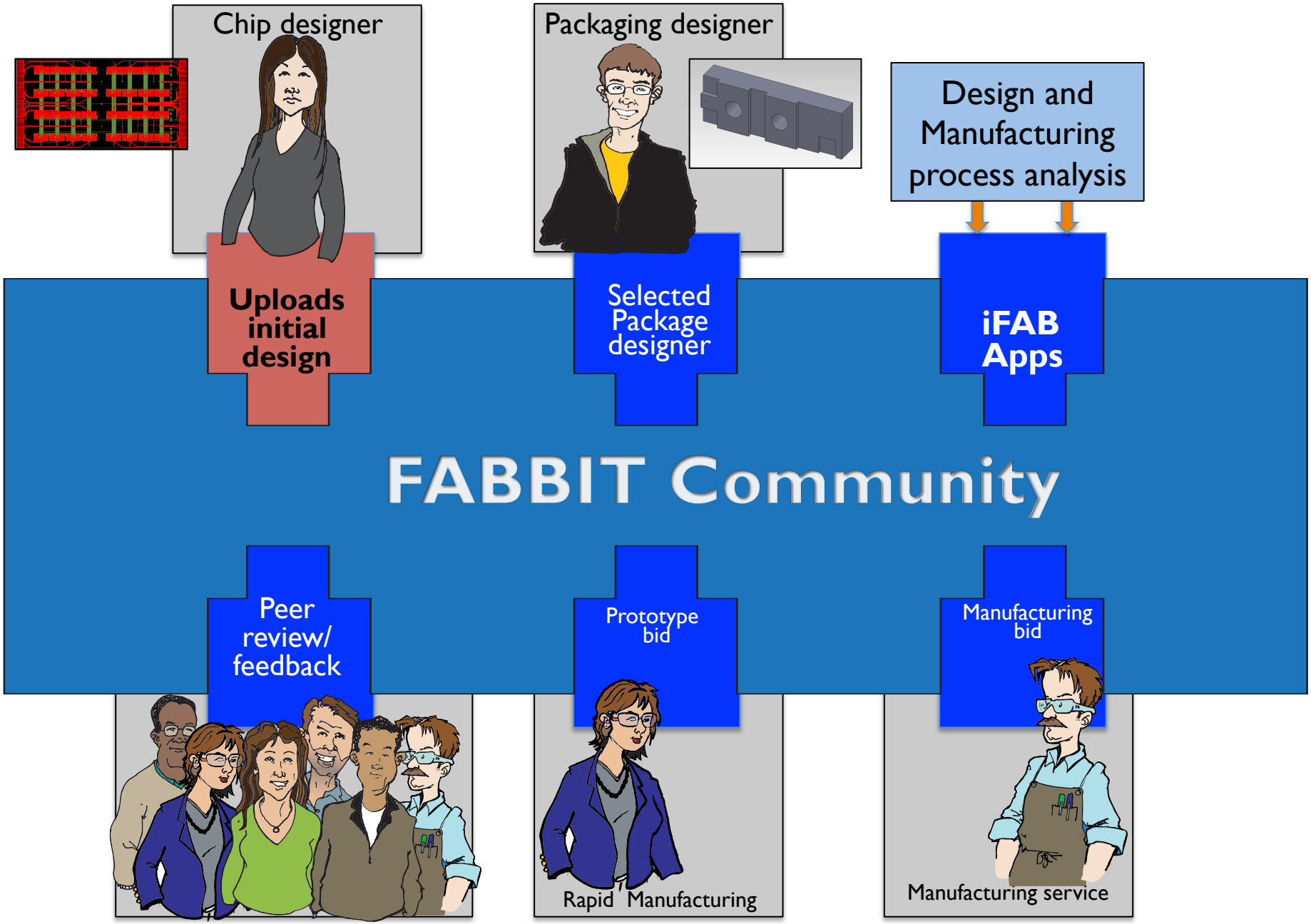
UC Berkeley

NSF CPS 2012

A "Social Network for Manufacturing"?



Bjoern Hartmann and Paul Wright, Berkeley

Fabbit Principles

- Design is an **iterative process -** designers end up with many file versions and alternatives
- *Therefore*:
  Use **revision control** tools to keep track of versions
- Design advances through **feedback –** from experts and through automatic tools
- *Therefore:*
  Offer social **review and Q&A tools**

Inspiration: Social Coding Sites

github
SOCIAL CODING

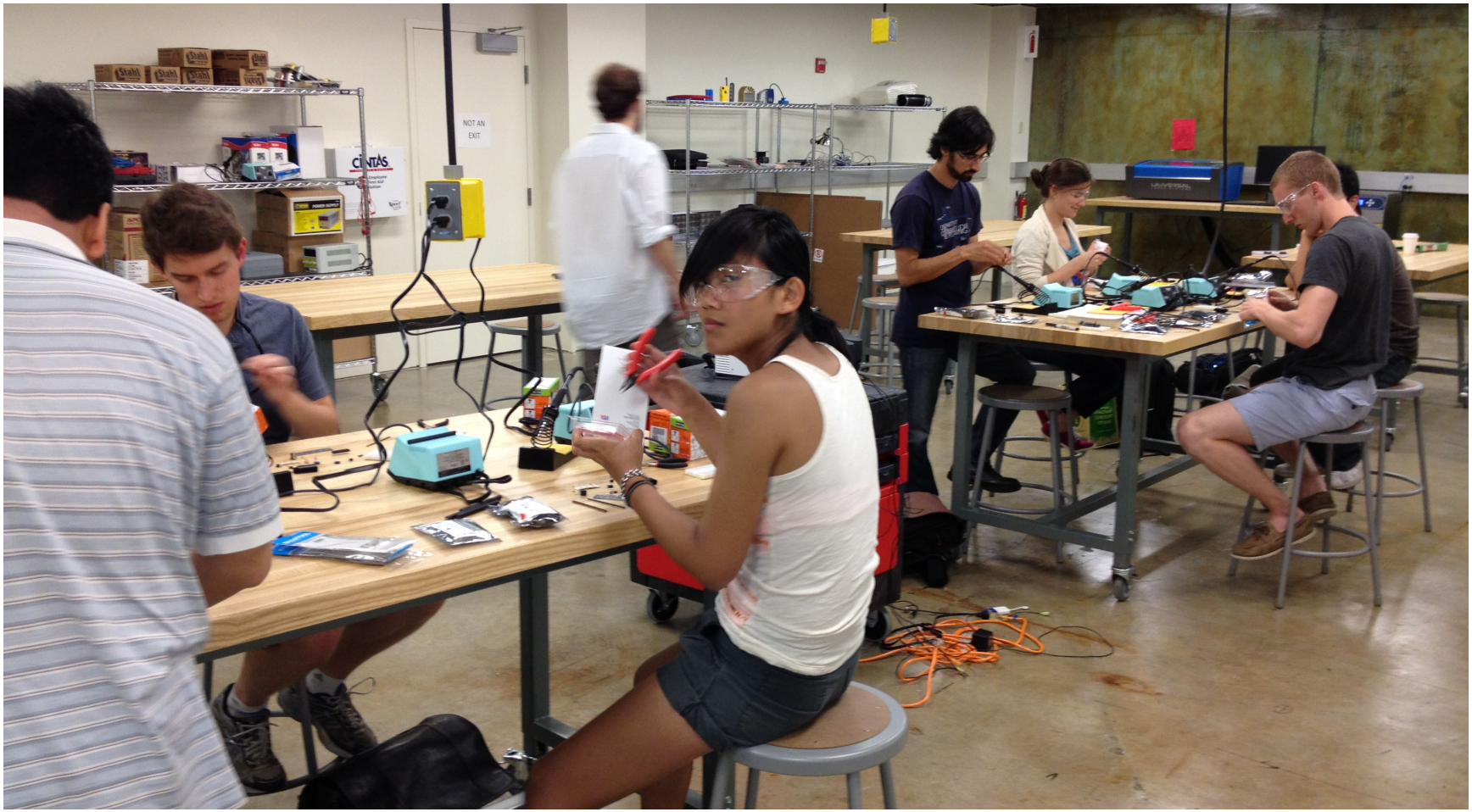
>1M users, >2M repositories
raised $100M venture funding yesterday

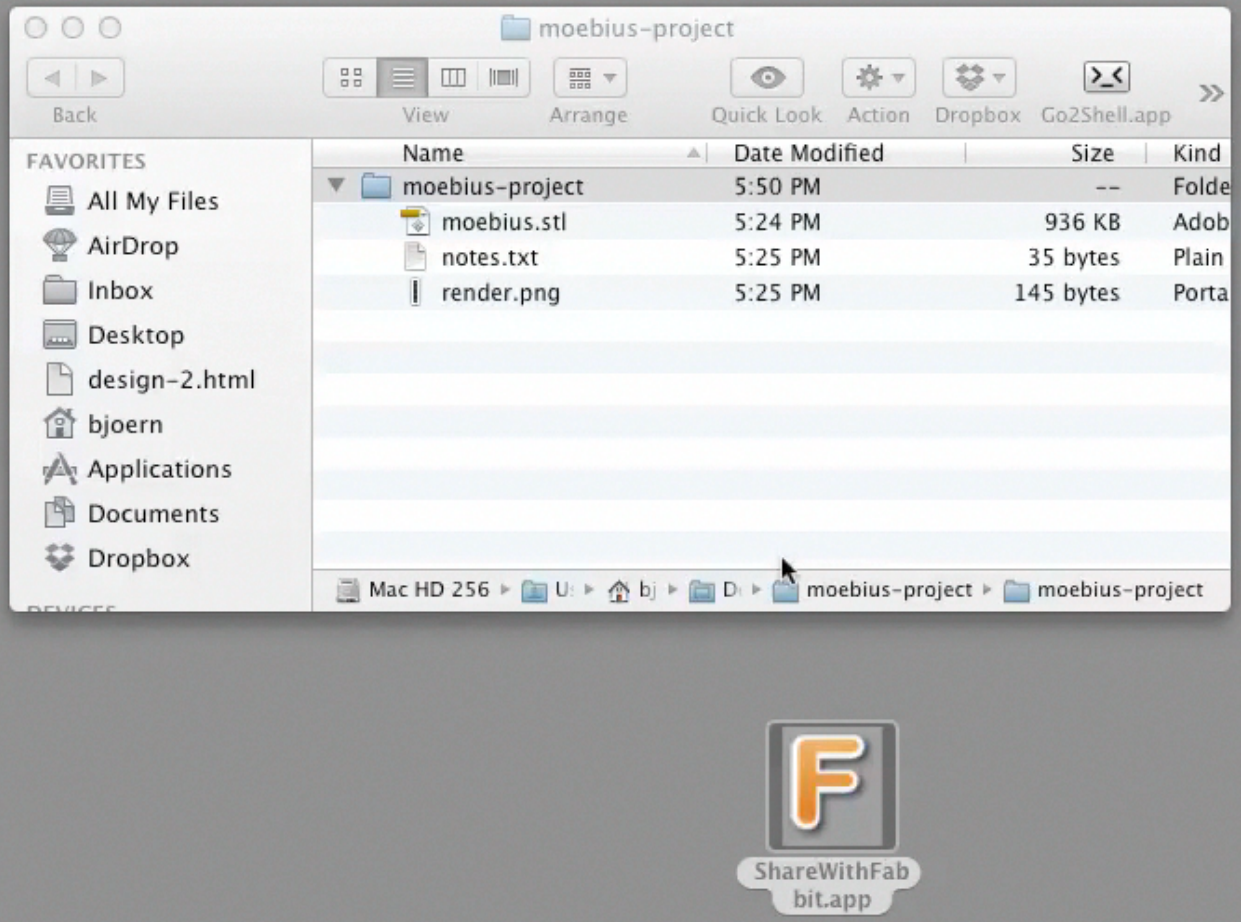
Atlassian
bitbucket

Google code

- Developers use **local tools** to create software
- **Revision control** software synchronizes files with Web
- Web interfaces offer **domain-specific social network** features:
  - Team coordination
  - Issue tracking
  - Following, cloning
  - Documentation hosting

Invention Lab




moebius-project
Back
View
Arrange
Quick Look
Action
Dropbox
Go2Shell.app
FAVORITES
All My Files
AirDrop
Inbox
Desktop
design-2.html
bjoern
Applications
Documents
Dropbox
Name
Date Modified
Size
Kind
moebius-project
5:50 PM
--
Folde
moebius.stl
5:24 PM
936 KB
Adob
notes.txt
5:25 PM
35 bytes
Plain
render.png
5:25 PM
145 bytes
Porta
Mac HD 256
moebius-project
moebius-project

ShareWithFab
bit.app

filelisting.html

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Files | Review | Fabricate

Project Files: Moebius

File	Size	Last Changed	Action
moebius.stl	45934	2012-06-24	
render.png	45145	2012-06-25	
notes.txt	495	2012-06-24	

Timeline

Today

You uploaded revision 3.
You updated notes.txt and moebius.stl.

Wed, 3/2/12

You uploaded revision 2. You updated moebius.stl and started a Review fo
revision 2.

Thu, 2/12/12

You uploaded the first revision.

Preview

Fabbit - (c) 2012 University of California, Berkeley

QuickTime Player File Edit View Share Window Help

172.19.131.161/~bjoern/ht

172.19.131.161/~bjoern/html-template/review.html

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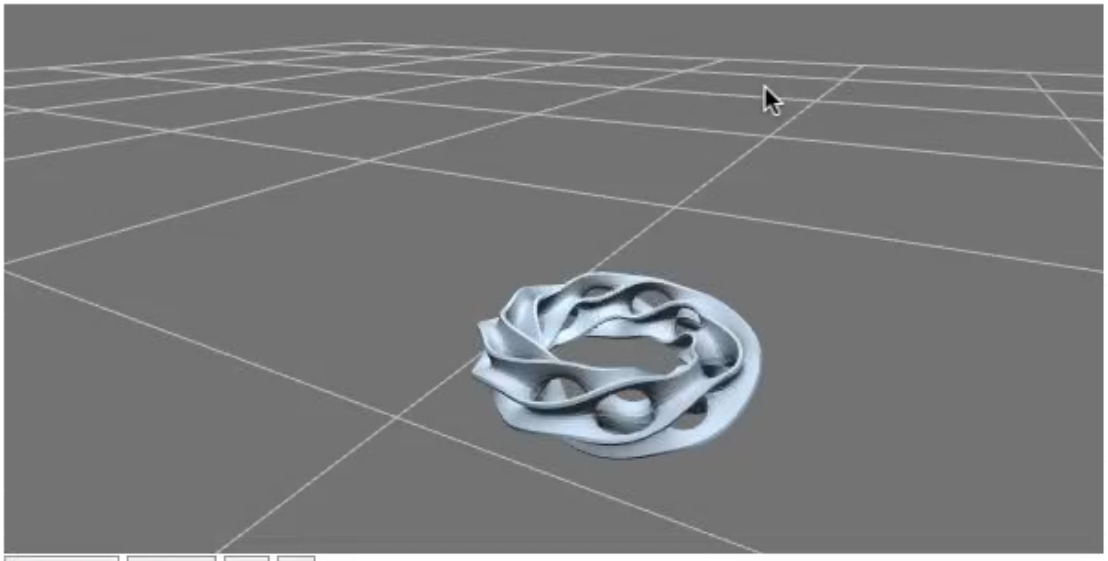
Files Review Fabricate

File Review: moebius.stl, Version 3



Rotate Stop + -

What questions do you have about this file?

172.19.131.161/~bjoern/ht

172.19.131.161/~bjoern/html-template/review2.html#

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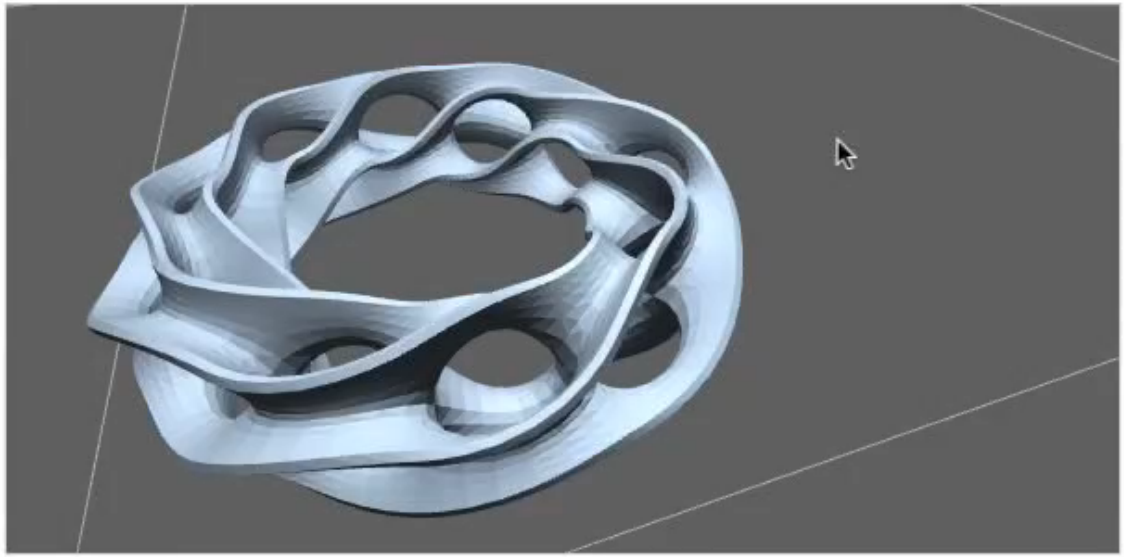
Files Review Fabricate

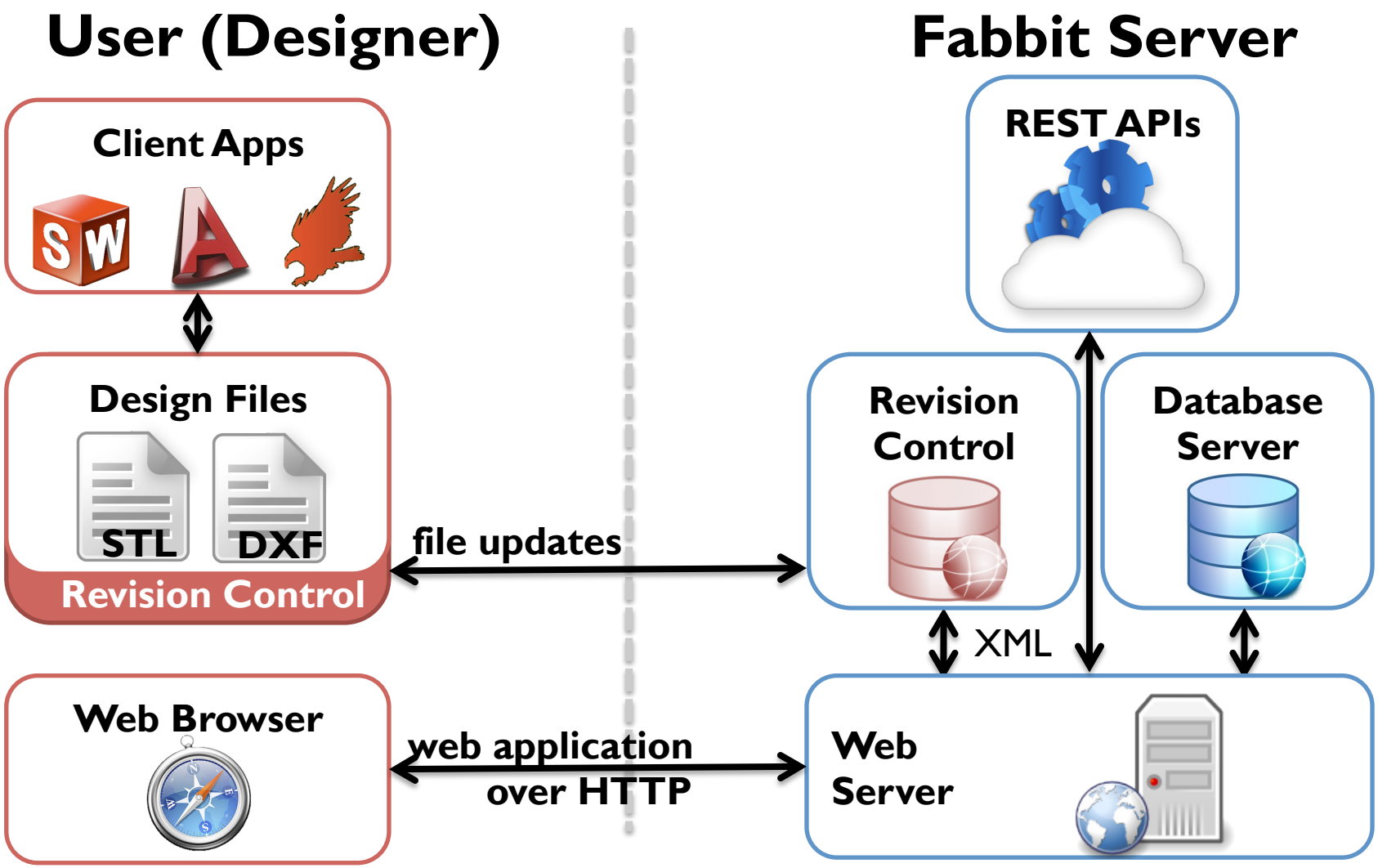
I'd like to set up a mold to cast this model in bronze. How should I go about this?



Add Note

Rotate Stop + -

Fabbit Web Architecture



First Fabbit Deployment

- **Interactive Device Design** course, Fall 2012
- Course goal: teach the design, prototyping, and fabrication of physical objects that respond interactively to user input
- 25 students from Mechanical Engineering, Computer Science, School of Information
- Taught in new CITRIS invention lab.

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