

COMS W4170

Programming by Demonstration 3

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1

Excel 2013 (and later) “Flash Fill” S. Gulwani

- Infers iterations over cells based on one or a small number of examples

- Type and press <enter> to accept suggestions
- Otherwise press <ESC>
- Or use ctrl-E to execute

<https://www.microsoft.com/en-us/research/project/flash-fill-excel-feature-office-2013/>

0:10-

	A	B	C	D
1	Annik Stahl	Annik		
2	Harry Miller			
3	Josh Barnhill			
4	Jonathan Foster			
5	Doug Thomas			
6	Ron Owens			
7	Colin Wilcox			
8				

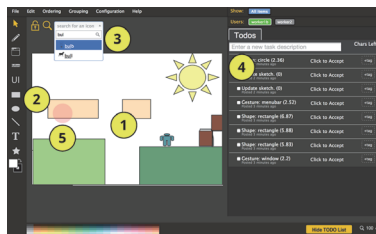
	A	B	C	D
1	Annik Stahl	Annik		
2	Harry Miller	Harry		
3	Josh Barnhill	Josh		
4	Jonathan Foster	Jonathan		
5	Doug Thomas	Doug		
6	Ron Owens	Ron		
7	Colin Wilcox	Colin		
8				

<http://office.microsoft.com/en-us/excel-help/split-a-column-of-data-based-on-what-you-type-HA102809794.aspx?CTT=5&origin=HA102809308>

2

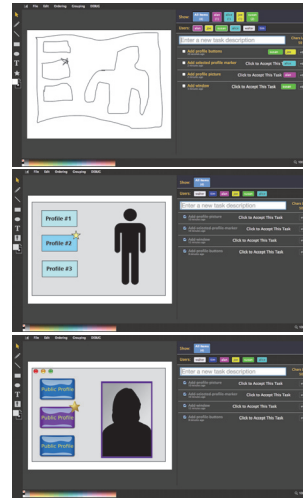
Apparition W. Lasecki et al., CHI 2015

- Crowd-powered refinement of UI prototype
- Crowd-powered “wizard-of-Oz” animation of prototype in response to designer’s spec



<https://www.youtube.com/watch?v=IBC6P7FwWY>

Automated recognition (\$1 recognizer) of simple sketchy UI elements and replacement with hi-fi ones

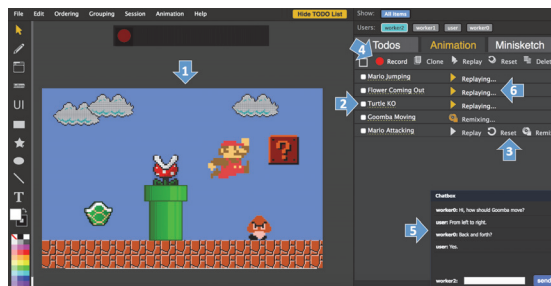


Crowd-powered refinement of prototype

3

SketchExpress S. Lee et al., UIST 2017 (built on Apparition)

- Crowd-powered creation, editing, and saving of animated behaviors for UI prototypes by workers
- “Demonstrate–remix–replay” approach
 - Workers can *demonstrate* behavior that is recorded, *remix* it to modify parameters, and *replay* it when needed
 - Recorded behaviors are saved with prototype



https://www.youtube.com/watch?v=A_Pngz1mbDs

4