



The Beauty and Joy of Computing

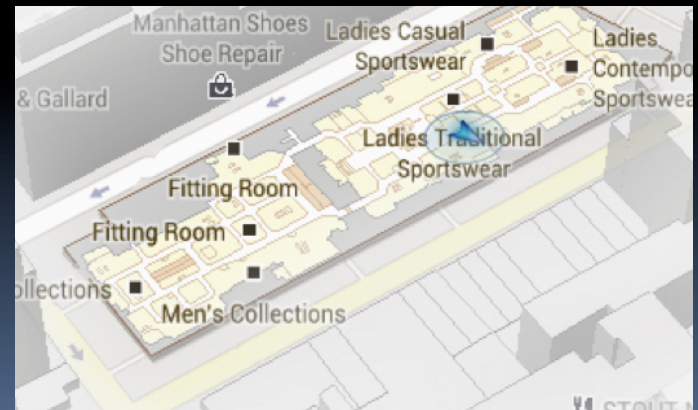
Lecture #18 Higher Order Functions II



UC Berkeley EECS
Sr Lecturer SOE
Dan Garcia

THE FUTURE OF MAPS? GOING INDOORS!

Google and Apple are both working on projects to continue your mapping experience indoors. (I'd be happy for a good map of the Berkeley Campus, frankly!) This would be a huge win for malls, museums, and city dwellers.

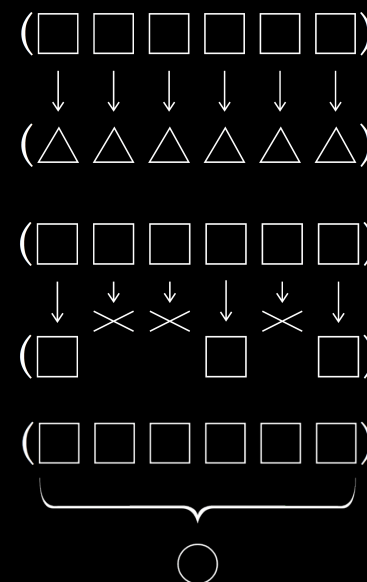


maps.google.com/help/maps/indoormaps/



Today

- Review useful HOFs
 - **map** Reporter over List
 - Report a new list, every element E of `List` becoming `Reporter(E)`
 - **keep items such that** Predicate from List
 - Report a new list, keeping only elements E of `List` if `Predicate(E)`
 - **combine with** Reporter over List
 - Combine all the elements of `List` with `Reporter(E)`
 - This is also known as “reduce”



- Acronym example
 - **keep** \rightarrow **map** \rightarrow **combine**
- The script, run and launch
- For each
- Compose example

