CT-1.4

Data representation & abstraction

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Data Representation & Abstraction

- Determining what characteristics of the problem are important and filtering out those that are not
- Use these to create a representation of what we are trying to solve

Students in a University Setting

Data Representation: Students

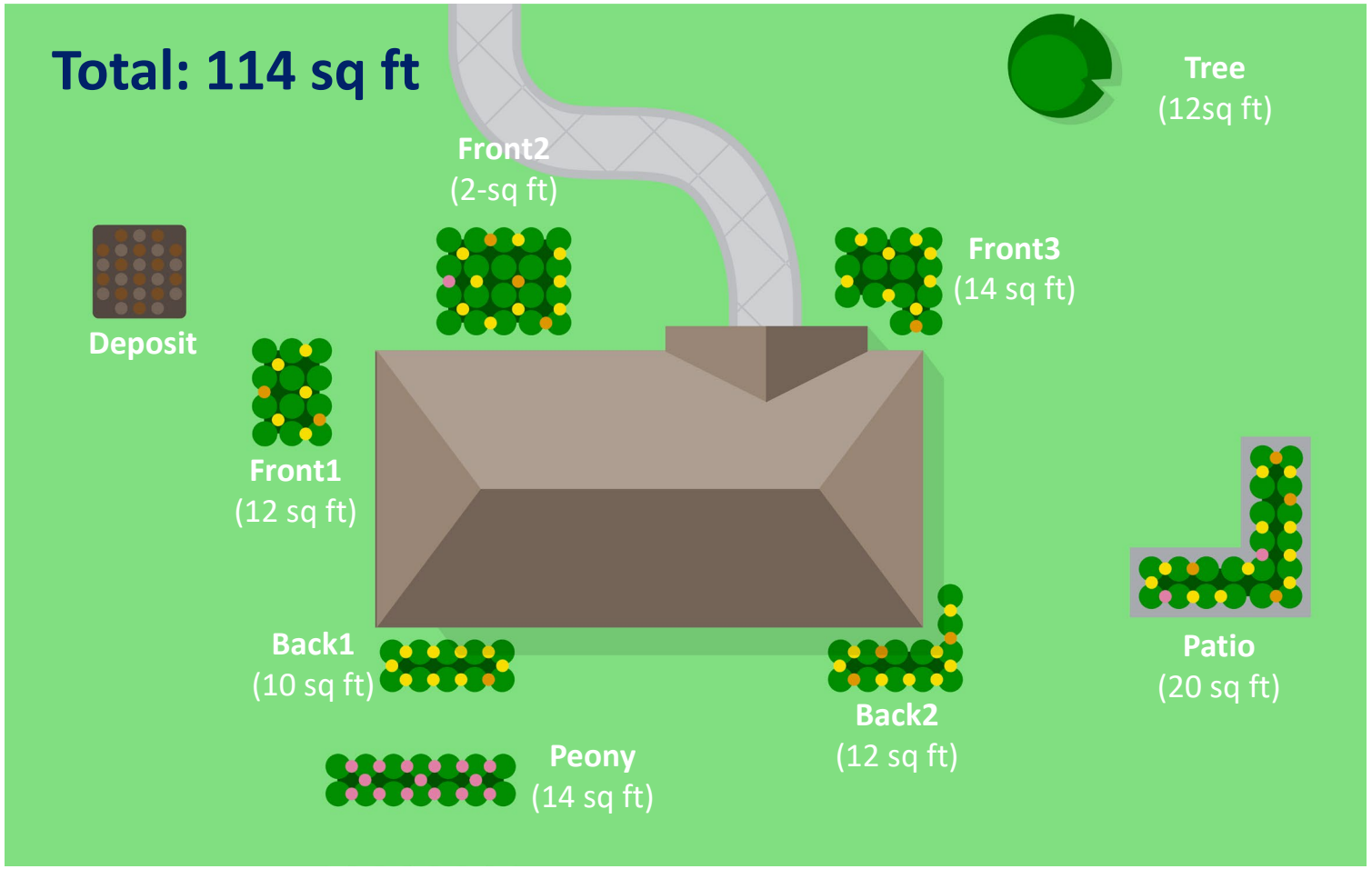
Important:

- name and billing address
- student id
- on-campus address
- phone number
- …

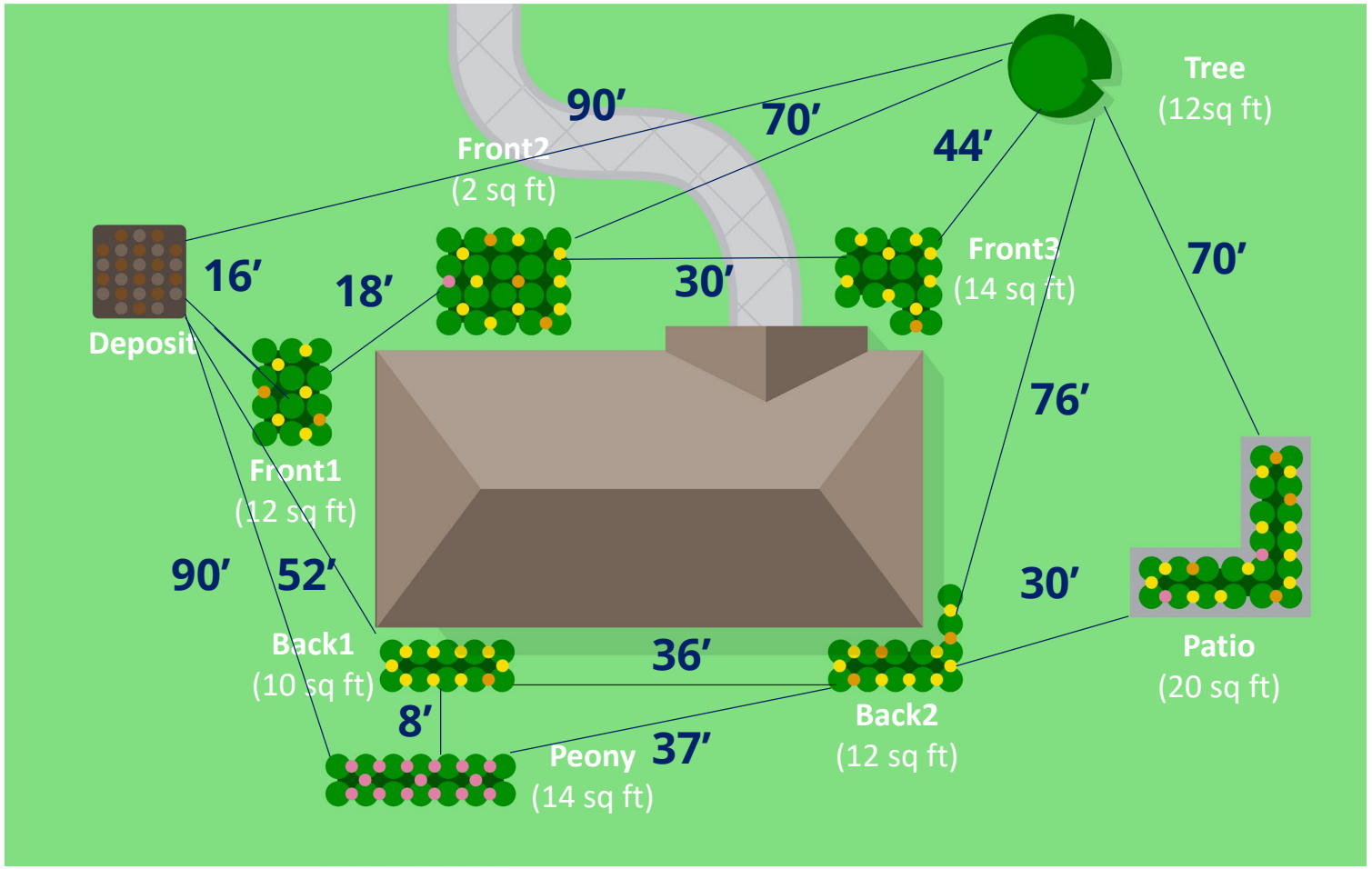
Not Important:

- favorite color
- shoe size
- food preferences
- …

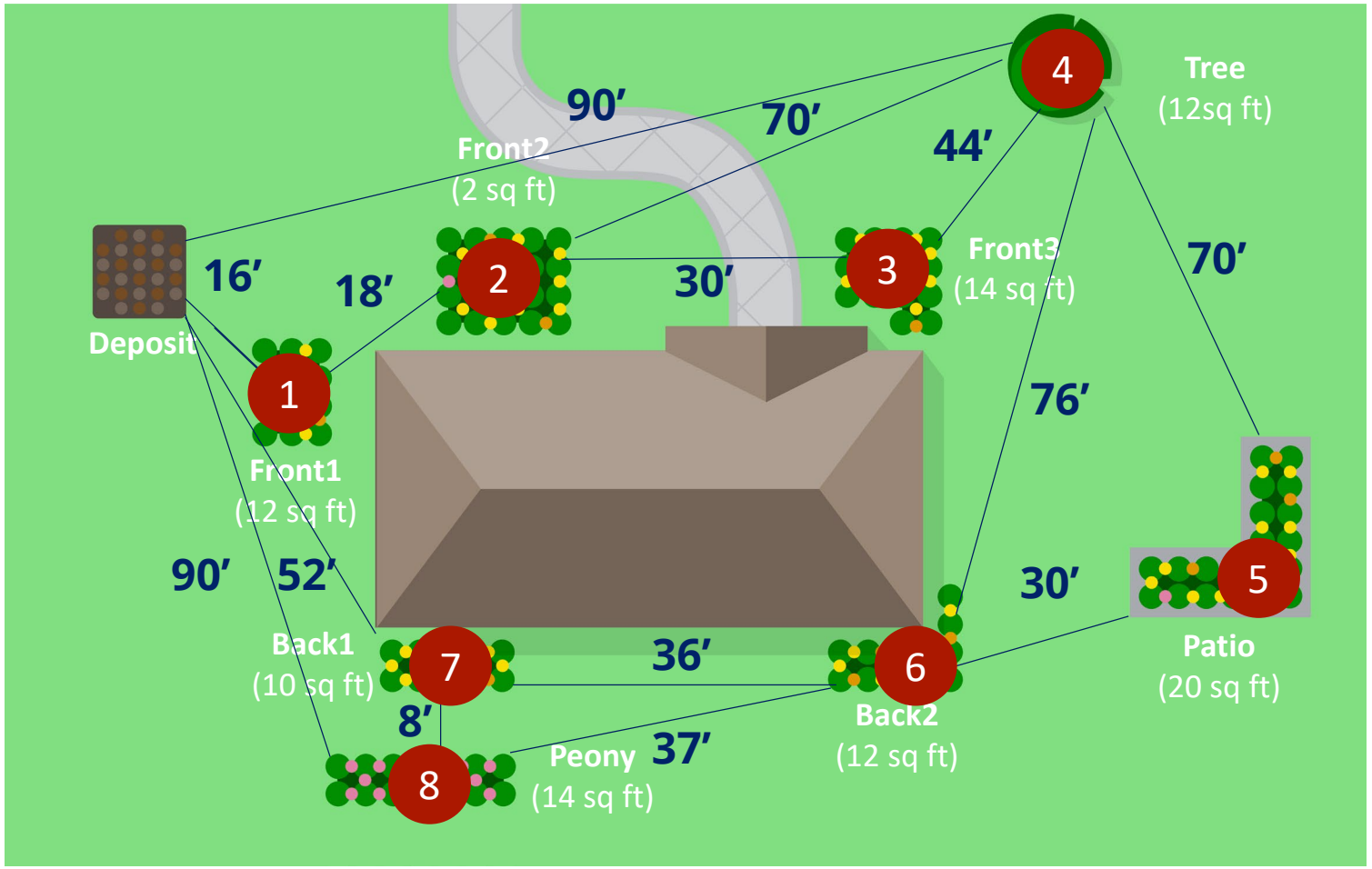
Data Representation: Mulching the Yard



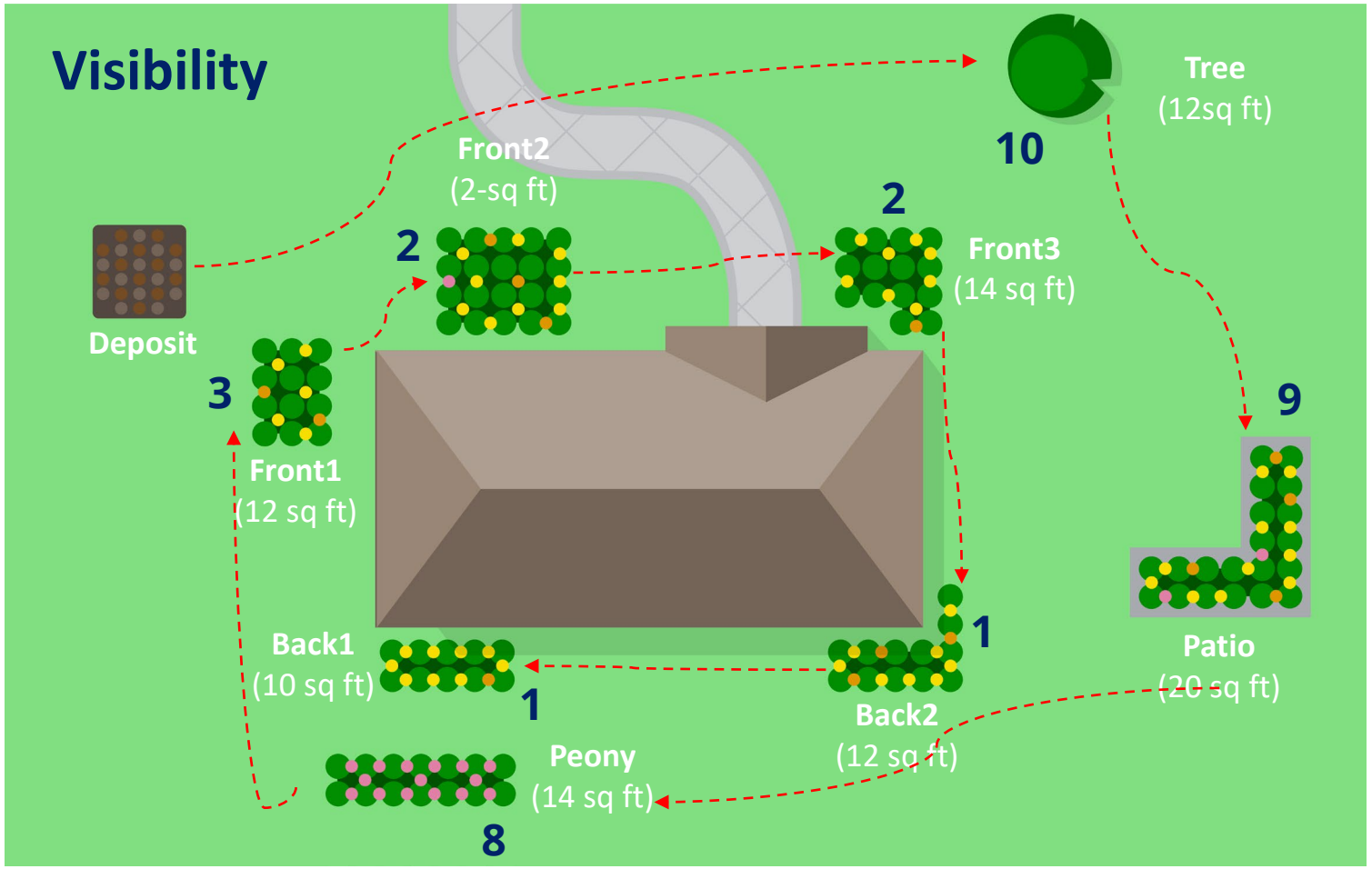
Layout: Distances Between Beds



Layout: Shortest Distance



Layout:
Maximizing Satisfaction



Data Representation: Books

Important:

- author list
- title
- ISBN
- publication date
- edition
- category
- ratings
- summary
- …

Not Important:

- color of the cover
- birthplace of authors
- complete contents of the book
- …

Summary

- In **data representation and abstraction**, we determine what characteristics of the problem are important and filter out those that are not
- Use these to create a representation of what we are trying to solve

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