implications for architecture

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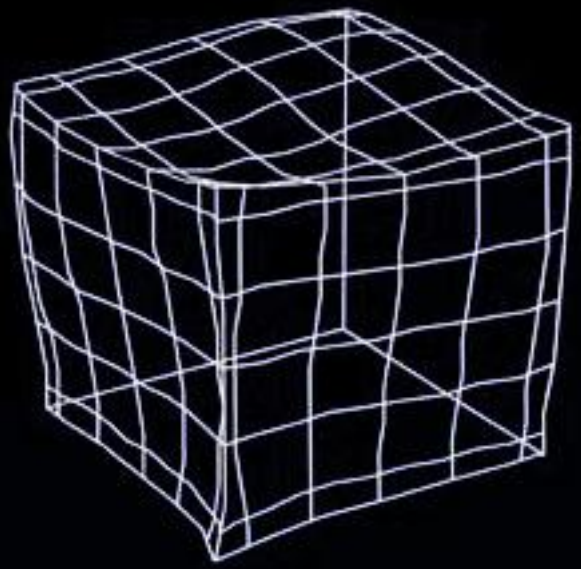
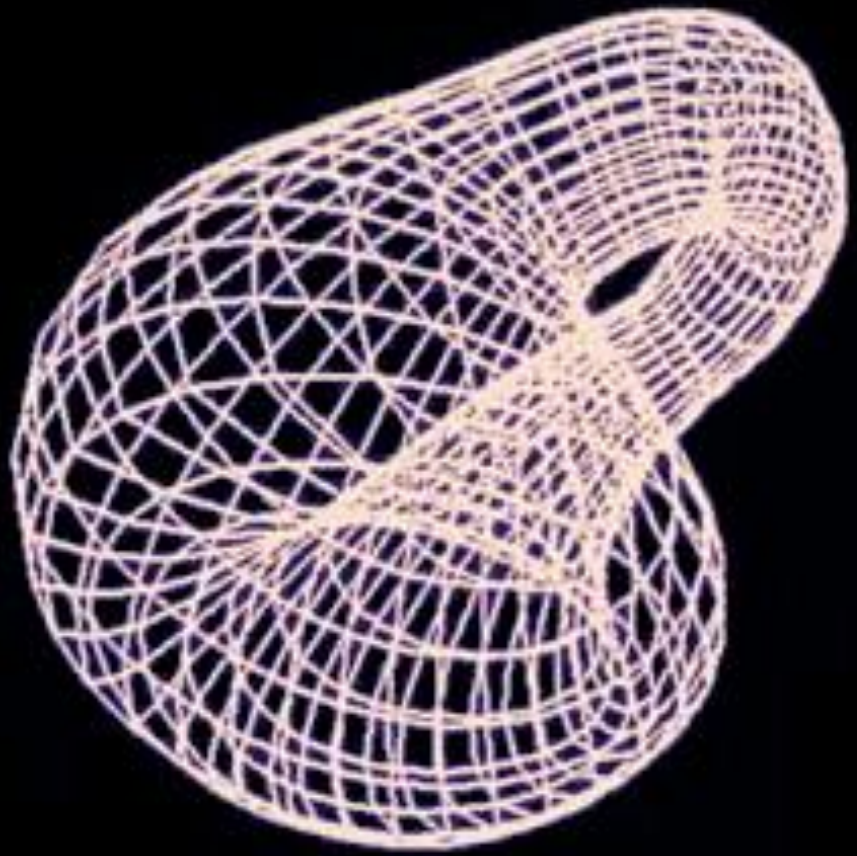
Research areas

- Geometric modeling.
- Multi-disciplinary collaborative design.
- New Media.

Geometric Modeling





New Media

- Technologies of representation and communication.
- Based on the paradigm of computation.
- Have the potential to radically change many aspects of human experience.

Impact of New Media on architecture

- Representation: complex objects.
- Synthesis: new ways of generating designs.
- Evaluation: understand how the design will perform.
- Collaboration: communication among multiple professionals.
- Smart buildings: buildings that aware of what happens in them, and can actively partake in those activities.

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‘Smart’ buildings

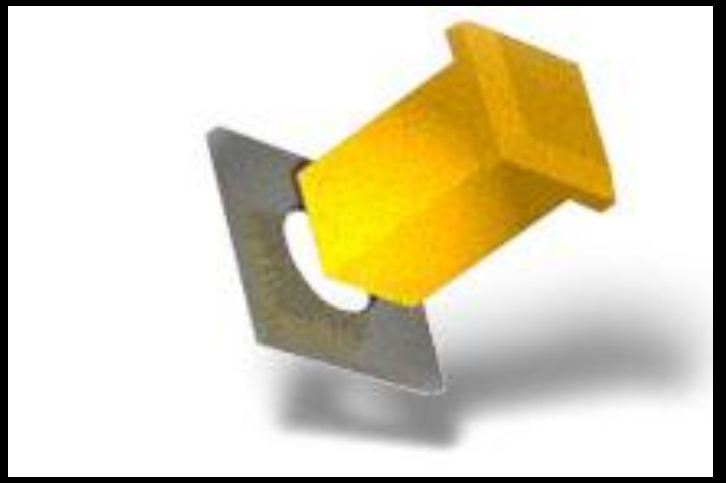
- Buildings that respond or adapt to changing needs.

Model-based adaptability

- Buildings that *initiate* changes to match expected behavior patterns.

Two paradigms

Square peg in a round hole



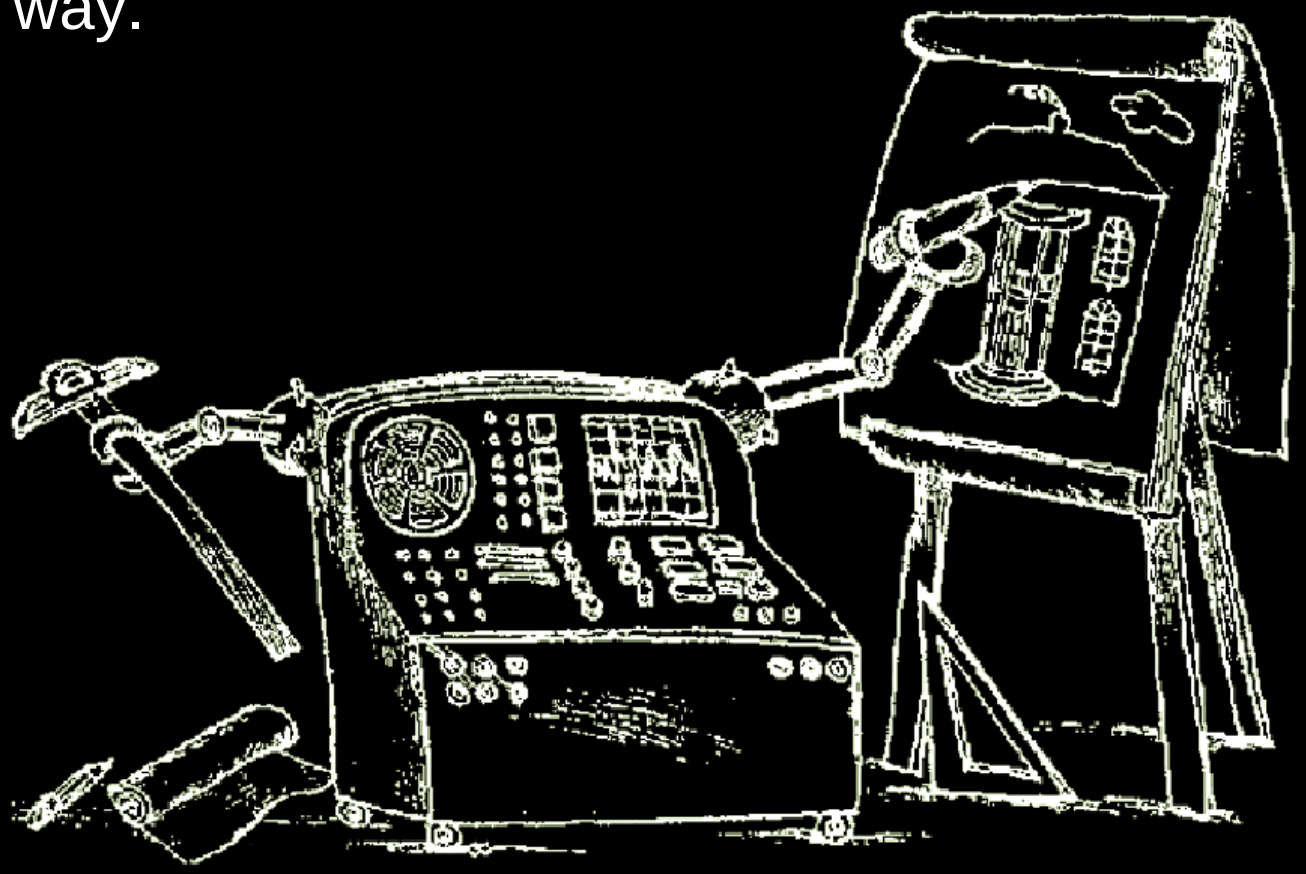
Horseless carriage

Square peg

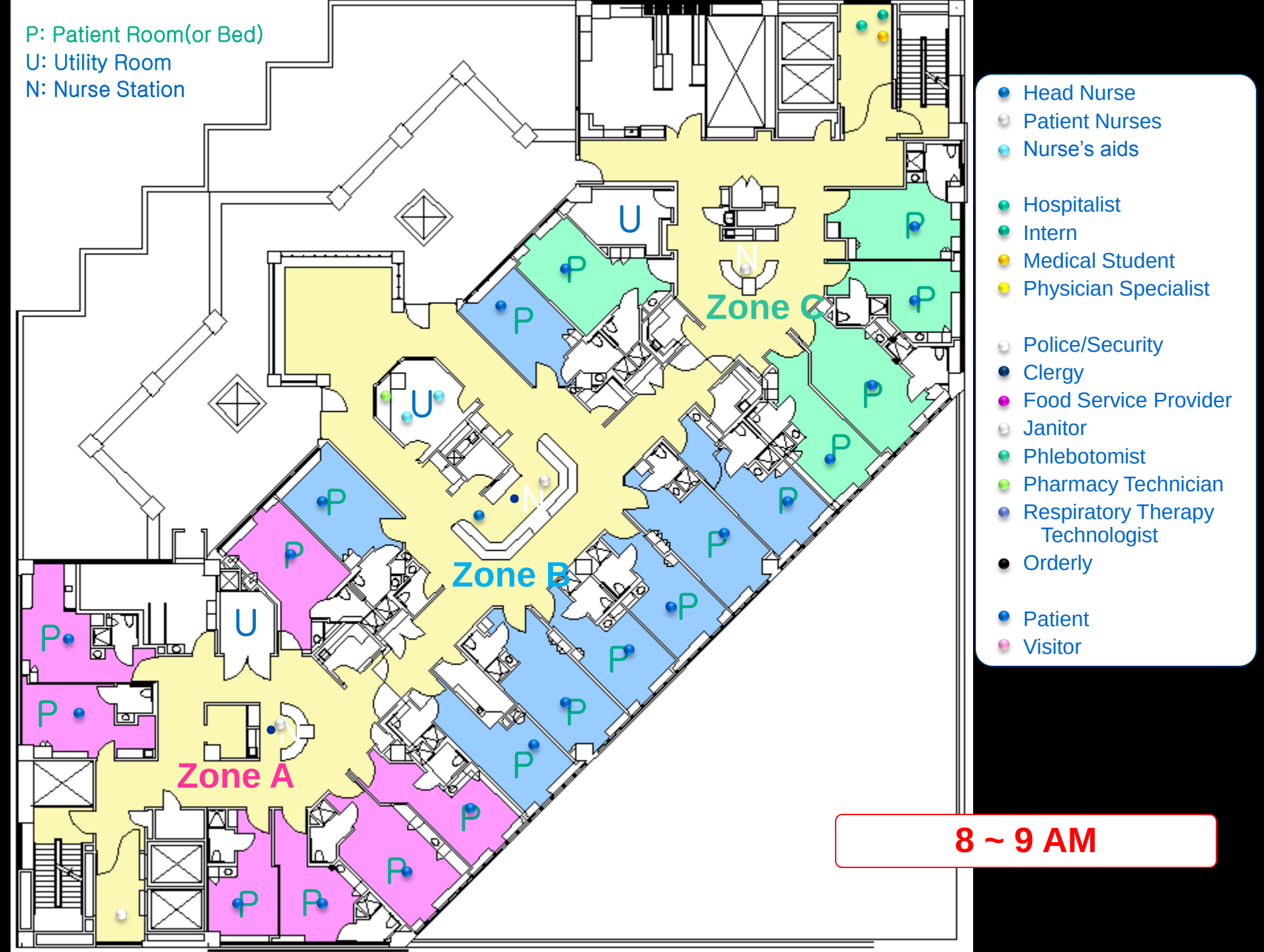
- New tools substitute old tools, but do not fundamentally change how the task is done.

Horseless carriage

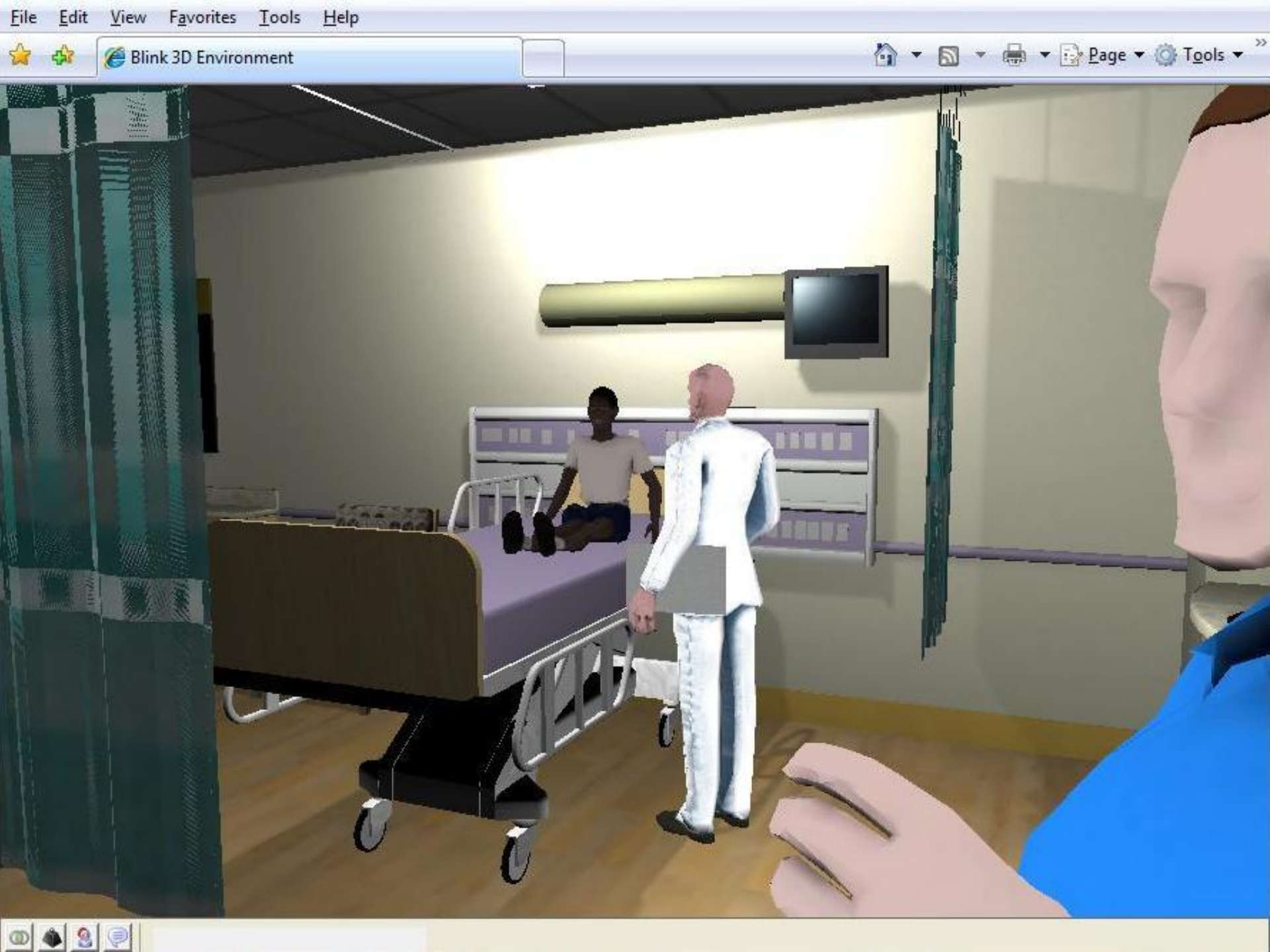
- New tools that are used the wrong way.



Geo-location


P: Patient Room(or Bed)
U: Utility Room
N: Nurse Station
Zone A
Zone B
Zone C
U
N
P
Head Nurse
Patient Nurses
Nurse's aids
Hospitalist
Intern
Medical Student
Physician Specialist
Police/Security
Clergy
Food Service Provider
Janitor
Phlebotomist
Pharmacy Technician
Respiratory Therapy Technologist
Orderly
Patient
Visitor
8 ~ 9 AM

Time	7	8	9	10	11	12	13	14	15
Head Nurse	Transition	Preparation	Patient Room Tour	Nursing Management & Administration		Meal	Patient Room Tour	Work Closing	Transition
Nurse	Transition	Preparation	Patient Room Tour	Medication	Vital Signs Measurements	Patient Care & Recording	Medication	Additional Nursing & Patient Room Tour	Meal	Medication	Vital Signs Measurements & Additional Nursing	Administration & Patient Care	Work Closing	Transition
Nurse's Aide	Goods Management & Preparation			Linen & Patient Room Management	Delivery & Goods Management	Nursing Assistance & Discharging Patient Management	Meal	Delivery & Goods Management	Linen & Patient Room Management	Admission Management & Goods Management	Work Closing & Report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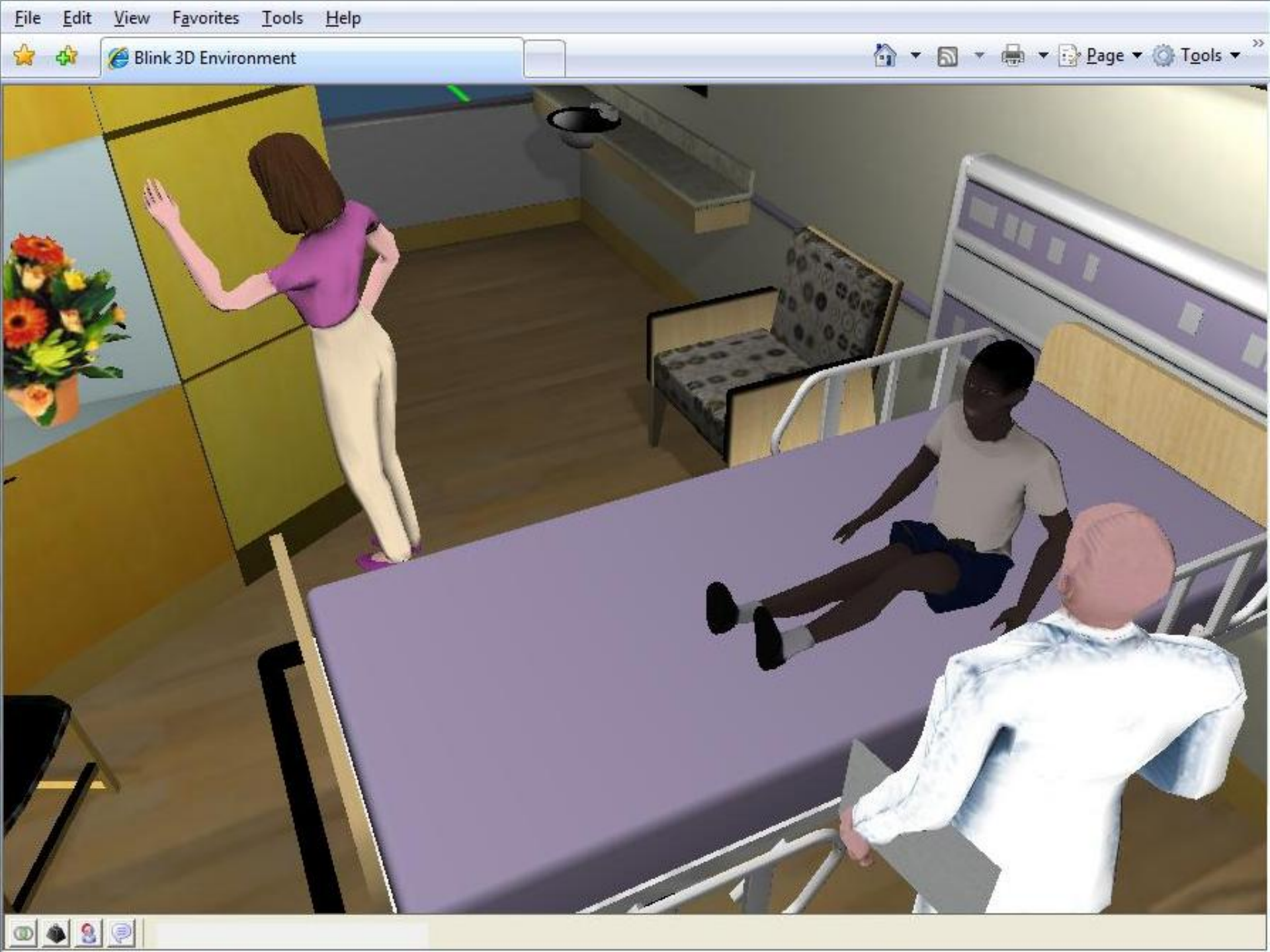
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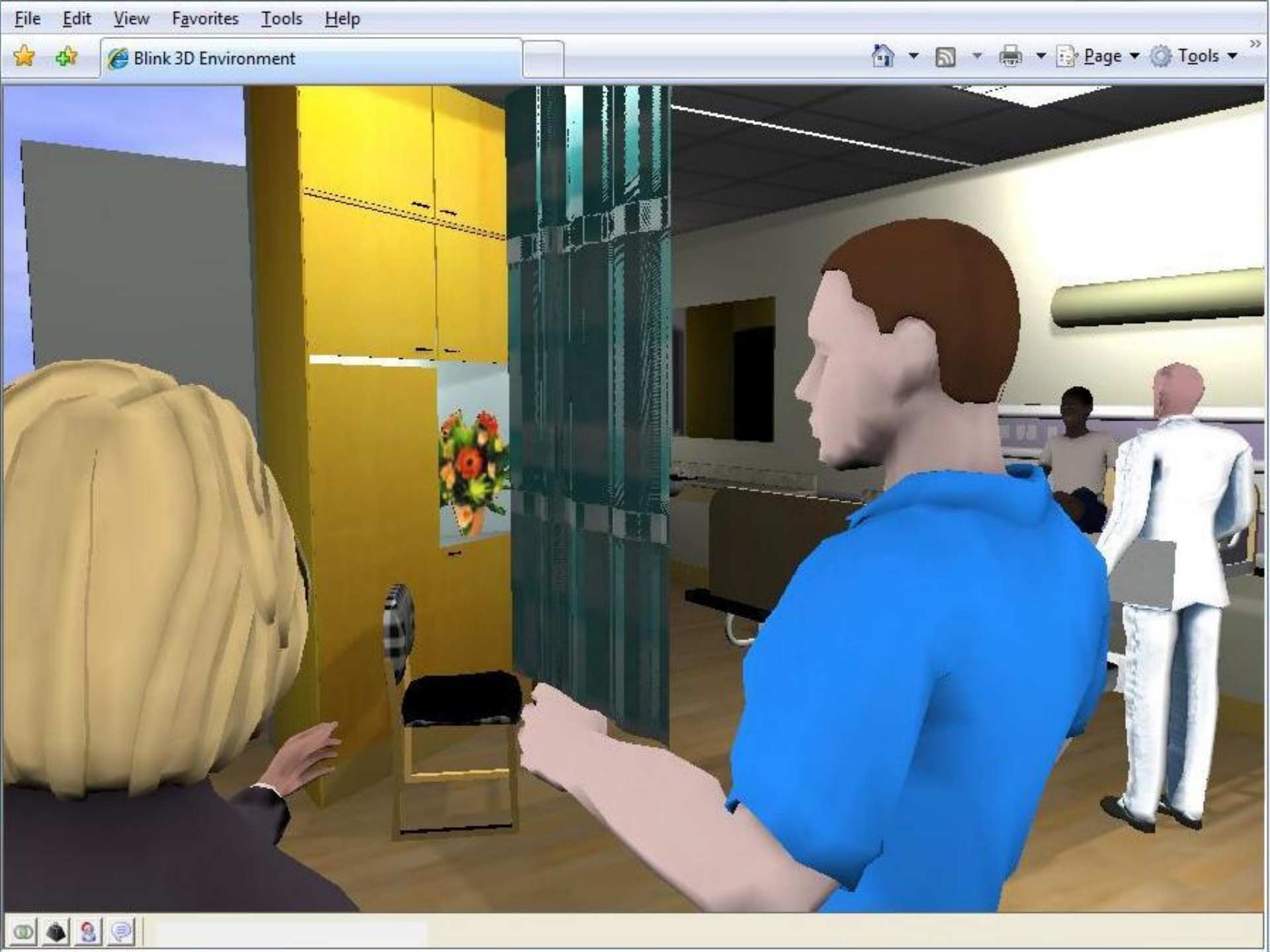
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