Justine Huang

Name of Building: Nanyang Technical University in Singapore
Location: Singapore
Climate: Tropical, high humidity, abundant rainfall and high, uniform temperatures
Design Strategies:
Evaporation: The building has a green roof that absorbs rainwater. This roof can also remove heat from the air through evaporation.
Solar: As a material, it will absorb less heat than concrete surfaces and can provide a much cooler space. There are shade devices on the ground floor to shield from the sun. The front strip of the building is shaded by the back strip building as this area hovers above it.
Windows are darkened to reduce the amount of sunlight that goes into the building
Convective: Use of water features to absorb heat from the air to cool the different spaces.
Ventilation: There is an atrium that is in the middle of the project that is outdoors
Conductive: The green roof has insulating properties for the building.
Changes to Project: There is a potential for the water to still run off on the sides of the building which could cause more condensation on the glass building. The sloping on the buildings when it touches the ground can be much gentler. There's still alot of bright sun penetration in the outdoor atrium. I would add more shaded areas within this open space.