WEEK 7

Pirooz Jalali
10696388

Task 1

Provide a summary of the main concepts that went through about solar radiation

Solar radiation absorbed by any surface is given by the product of how much solar energy is incident on that surface, depending on the direction of the Sun and the orientation of the surface relative to this direction, and the fraction of that incident radiation that is absorbed.

RADIANT TEMPERATURE

All bodies exchange thermal radiation with their surroundings, depending on the difference in their surface temperatures and their emissivity. This radiant exchange is an important component of the thermal comfort that will be experienced by a person, particularly in places where there may be significant differences in radiant and air temperatures, for example, near a large window.

SOLAR RADIATION DENSITY

Sunlight is a portion of the electromagnetic radiation given off by the Sun, in particular infrared, visible, and ultraviolet light. ... When the direct solar radiation is not blocked by clouds, it is experienced as sunshine, a combination of bright light and radiant heat.

OPERATIVE TEMPERATURE

It is the virtual ambient temperature with which the sum of the radiative thermal and convective linearized flow is exchanged which exchanges with the air and all the other surfaces.

ATMOSPHERIC ABSORPTION

Atmospheric absorption is absorption by the earth's atmosphere of most of the X-rays and ultraviolet and infrared radiation emitted by the sun, except visible light. It prevents the earth's surface from becoming too hot.

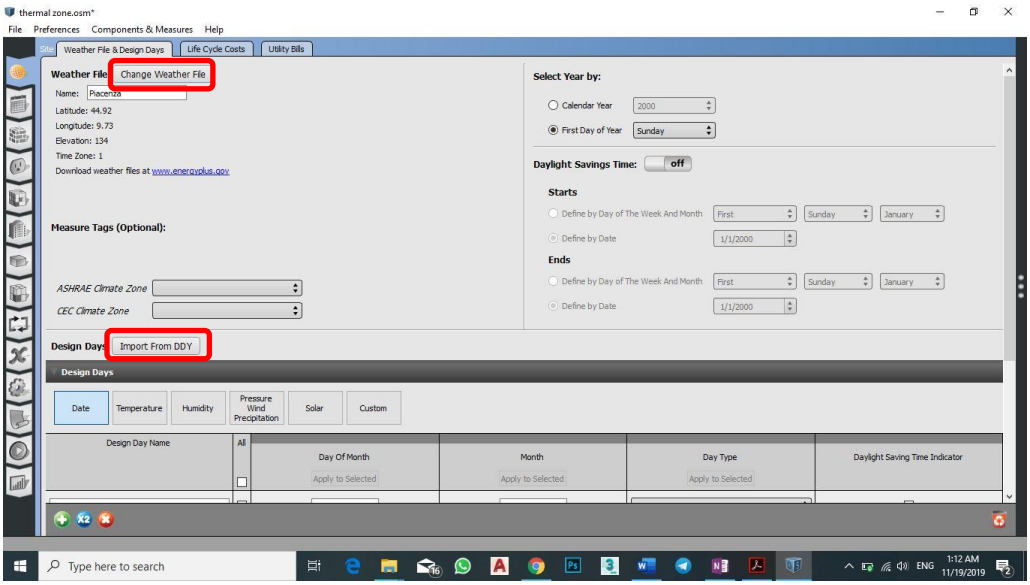
SOLAR ENERGY

Solar energy is radiant light and heat from the Sun that is harnessed using a range of ever-evolving technologies such as solar heating, photovoltaics, solar thermal energy, solar architecture, molten salt power plants and artificial photosynthesis.

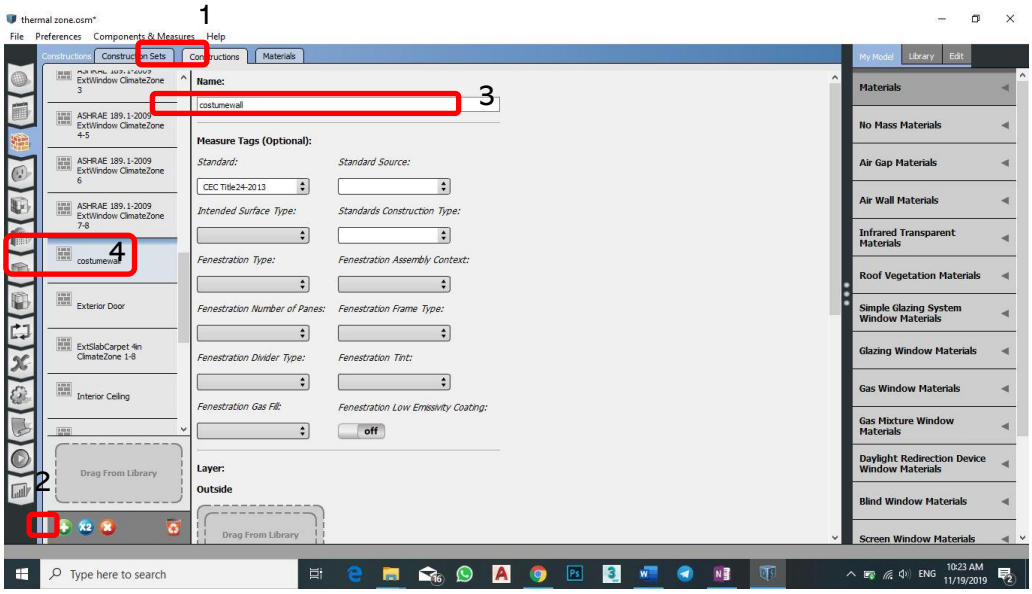
Task 2

create a pdf file with screenshots of all of the steps we went through in the second lesson on Openstudio and explain briefly the reason behind the use of each step

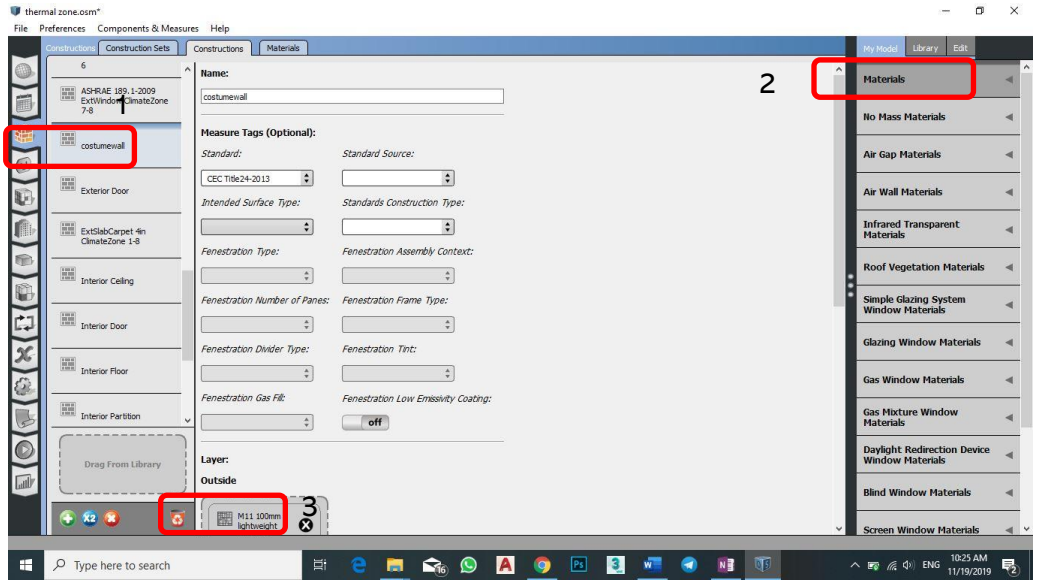
Import weather data of your place



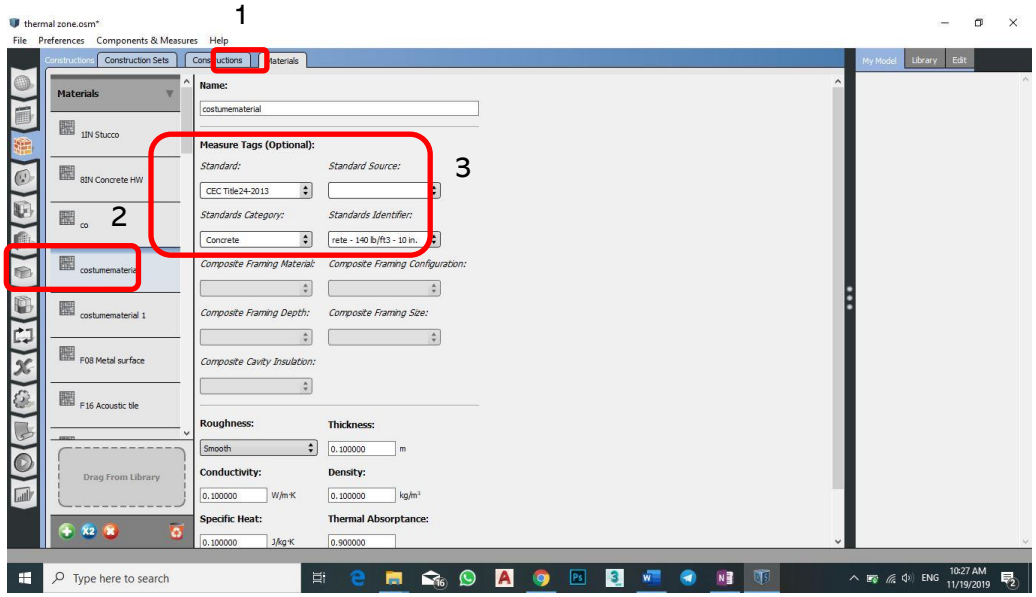
Customized the construction



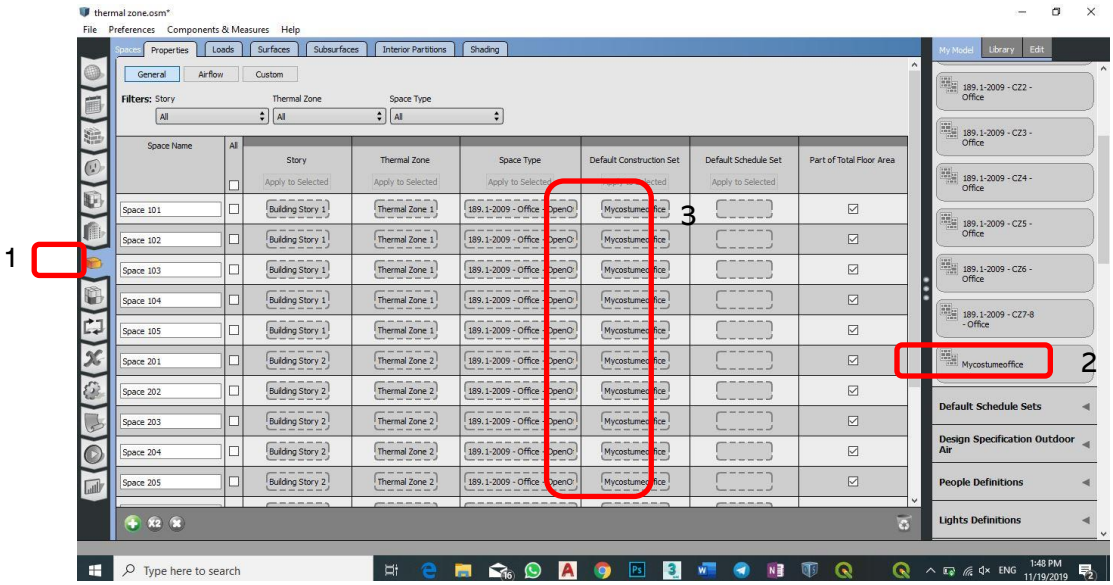
Customized the construction



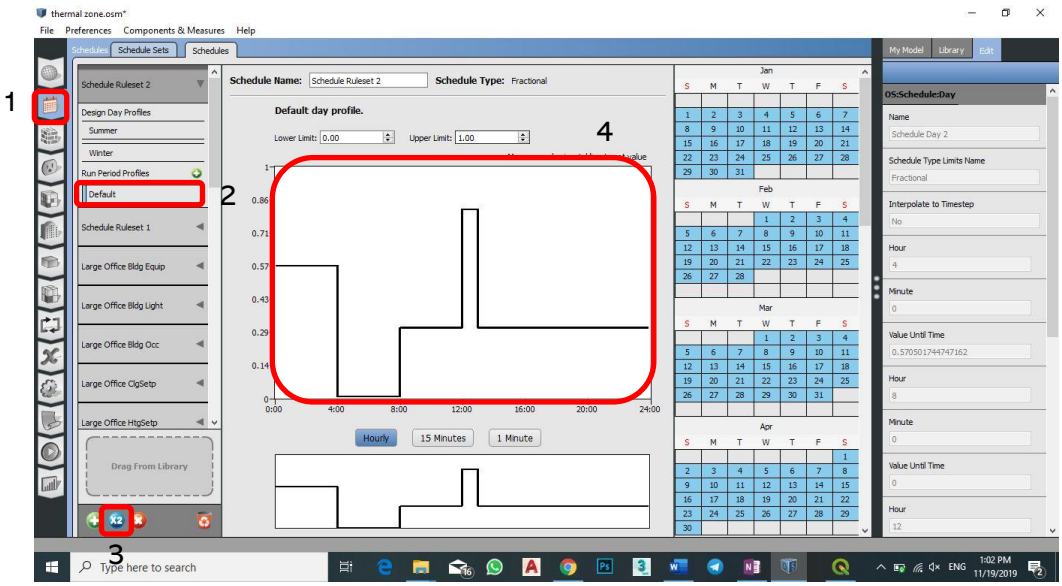
Applying the materials



Applying the customized construction into spaces



Schedules your spaces according to the date



Import Custom construction into specific elements