ADRIAN MONTENEGRO CONVERSATIONAL PROTOTYPE:

PLANT MOISTURE TRACKER (PMT) PURPOSE STATEMENT:

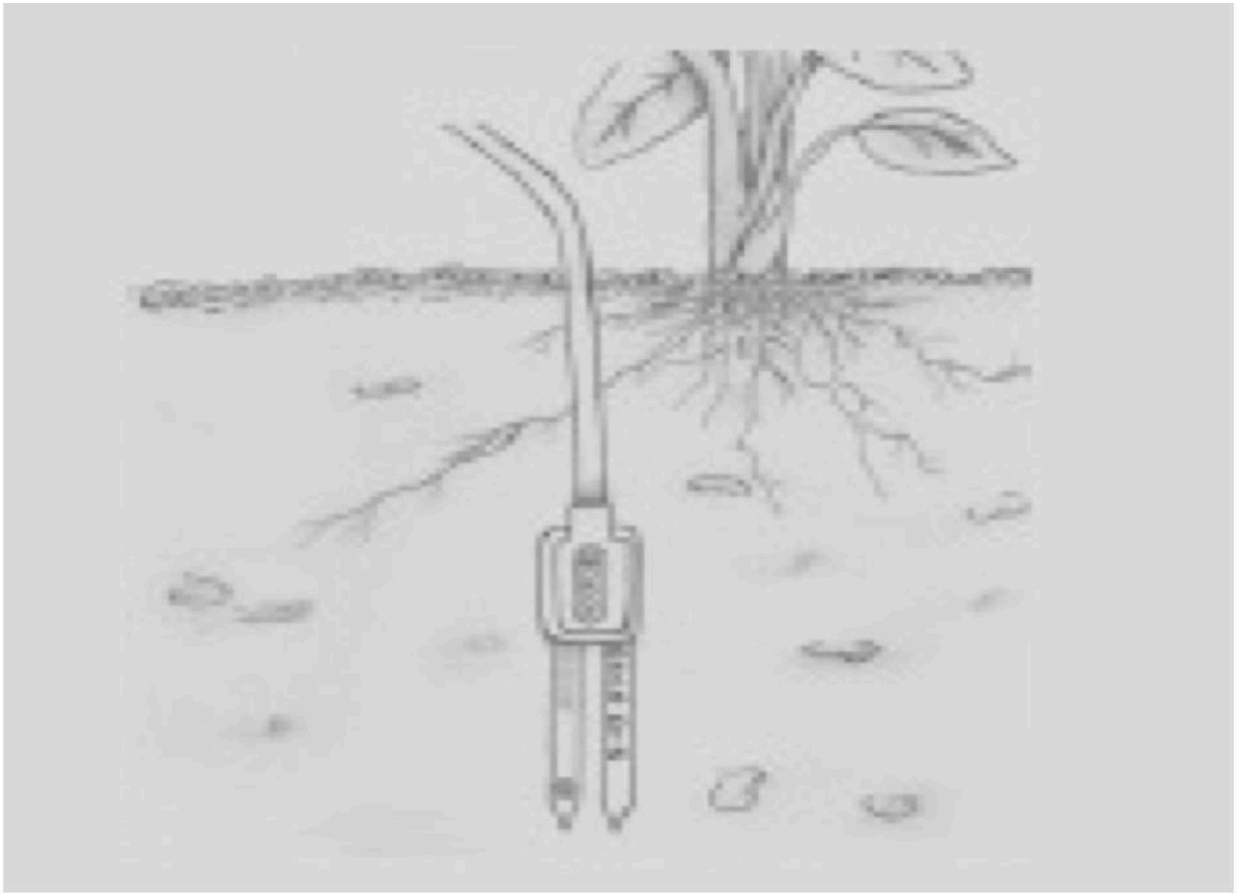
The plant moisture tracker will be used by house-plant owners looking to simplify the process of plant-watering and care; the tracker will monitor plant moisture levels on set intervals and notify the user accordingly via mobile application.

CONDUCTED RESEARCH:

- "Water deficiency symptoms are similar to over-watering and it is important to identify the cause. Symptoms include slow growth, wilting, discolored leaves and flowers, burning on edges of leaves. The affected plant can also suffer from disrupted nutrient uptake."(According to https://myplantin.com/about-us, website dedicated to gardening)
  Maintained definition of water deficiency utilized in the creation of the PMT

  As asserted by Wan and colleagues in an article entitled "Soil moisture–plant interactions: an ecohydrological review", the status and distribution of soil moisture affect ecohydrological processes such as runoff, infiltration and evaporation and plant morphology and function (e.g. transpiration and photosynthetic rate). Plants affect soil moisture dynamics through its involvement in the water cycle. Soil moisture, evapotranspiration (the process by which water is transferred from the land to the atmosphere by evaporation from the soil and other surfaces and by transpiration from plants.
  and atmospheric factors are closely linked in transitional soil moisture regimes (ranging from dry to wet soil conditions). "Clarifying the mechanisms of soil moisture–plant interactions can aid in the development of soil moisture models, especially those comprising detailed process representation and feedback." (Wan et al. (2019)) - https://link.springer.com/article/10.1007/s11368-018-2167-0

VISUAL REPRESENTATION OF (PMT):



Rough draft of visual representation, subject to change at creator's discretion; tongues inserted directly into soil will measure moisture as indicated above, then execute the process as described early in the purpose statement