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**Hard Problem Area:** Human Behavior, Policy Governed Secure Collaboration

**Overall Research Goal(s):**
What do you ultimately hope to show with your research? This section can involve some jargon, but try to relate these goals to your broad impact section. Start with the larger goal(s) and narrow the scope towards your specific study (and specific goals, below).

Our goal is to design a crowd RE process to gather privacy requirements. The objective is to understand how creative potential, personality trait and privacy attitude influence the ideas that crowd workers produce.

**Broad Impact:**
Why is your research important? This section should avoid any technical jargon and should be meaningful to the general public. Try to keep this down to five sentences. This should be hierarchical: the broad impact decomposed into more specific impacts that connect your overall research goals to your more specific goals.

Crowdsourcing enables quick gathering of requirements with a high coverage. However, several challenges remain. In our previous study, we found that creative potential and personality trait influences novelty of the ideas proposed. In this study, our objective is to find the influence of privacy attitude in addition to creativity potential and personality traits, and design a crowd RE process.

**Specific Research Goals:**
Lay out the steps you are going to take to achieve your overall research goal. You can get technical here.

We hypothesize that privacy attitude of a crowd worker influences the creativity of the privacy preserving idea the worker proposed. We further hypothesize that privacy attitude and creativity potential of workers whose idea a crowd worker is exposed to, also influences the idea proposed by crowd worker. To test our hypotheses, we will conduct a study on Amazon Mechanical Turk, where crowd workers will complete creativity survey, personality survey, and privacy attitude. Also, they will be required to elicit requirements of a smart home, and rate requirements proposed by other workers.

**Proposed Data Collection (if applicable):**
What data will you collect to answer your research goals? How will you collect it? Will it be an observational study, randomized comparative experiment, or simulation study? Include
potential biases and be prepared to explain how the data will achieve your specific research goals.

Each crowd worker completes a creativity survey, personality survey, and a privacy attitude survey before starting the task of identifying requirements.

Workers rate generated ideas on creativity and privacy.

**Success Criteria:**
How will you determine whether you satisfied your specific and overall research goals?

Human subject study demonstrate that the ideas generated during the later phases of sequential Crowd RE process are more creative and privacy-preserving than the ideas generated in earlier phases

**Anticipated Difficulties, Limitations, and Criticisms:**
What will make the above specific research goals difficult to achieve? How do you plan on dealing with these difficulties if they arise?

Threat to data quality: We set a threshold on minimum number of task completed, and approval rate for any crowd worker to qualify for the study

Threat to prior knowledge: Each crowd worker completes a presurvey, and in each phase each worker is shown information about smart homes