COM2027 Ideas for Gamification in Dementia

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I talked to a friend (Clive) who cares for patients with dementia, and my finding is summarised below, with the hope that you can find some ideas useful; and this is in addition to MindMate's talk.

Characteristics of patients with dementia, with examples
- Difficulty with money
- Forgetting names
- Problem with spatial memory
- Dementia patients don't use smartphones
- They don't realise the room temperature so carers would care about their room temperature and general well-being even if they are not with the patient.
- Forget that they have just eaten; so they will eat over and over, lost the notion of time

Clive works for a day centre and everyday patients (clients) go through the following activities:

- Social session – they like to chat over tea and coffee
- Cognitive session – they read newspapers, play card games, board games, cross word, word searches, etc
- Physical session – they do hoops, throw rings, sticky balls, table tennis, Wii games
- Reminiscent session – they talk about old film stars, or movies, or about their experience, music, usually in a group of 3-8. Sometimes, they would recreate the act and dance. About music, they love the 40's and 50's but no war songs for feat of evoking traumatic experience
- Creative/art-and-craft session – they draw and paint pictures, or make paper craft, etc.

Think:

- What app can improve the care professional's day job around the five types of session above?
- What app can help patients live more independently?
- What app could help carers (often friends or relatives) to be more informed or aware of the where-about or activities of the patient when they are away?

Some app ideas:

- Socializing – helping patients to keep in touch with love ones and vice versa for carers
- Serious gaming for diagnosis (e.g., detecting early on-set), for measuring disease progression (e.g., detecting deteriorating mental capability), or brain-training (which is an important non-pharmacological intervention)
- Do a bit of citizen science, answering questions like:
  - Apps for differentiating what is dementia and what not:
    - Walking into a room and forgetting why you were there is not dementia
    - Walking into a room and not knowing where you are – indicates dementia
  - Does playing table tennis have any protective effect against dementia?

Remember:

- The project can be as interesting (or boring), as challenging (or as simple) as you want it to be. However, it must fulfils a number of requirements.
- For the requirements, please see the student Guidebook.