**Start Time: \_\_\_\_\_\_\_\_\_\_ End Time: \_\_\_\_\_\_\_\_\_\_**

**Case Study 2: Personalised Emergency System**

**System Story:**

The aim of this system is to support a person, generally an older person, to remain living at home longer. Emergency systems typically have two features: (1) an emergency alarm: the older person can raise an alarm if they require emergency attention, via e.g. pushing a button on a pendant worn around their neck or wrist; and (2) a wellbeing check: the older person informs a service provider that they are well, on a daily basis, via e.g. a button on a base station.

If no indication of wellbeing is received during a specified period, the service provider initiates checks on the older person. The emergency system is installed in an older person’s home, and data from the system is monitored by a service provider. If the older person raises an alarm, the service provider contacts the person to ask if they require help, or to check that the call is not a false alarm (accidental triggering of the alarm).

If the service provider fails to make contact, or makes contact but the older person is in need of help, the service provider calls a nominated relative or friend to provide assistance, and ultimately, emergency services (e.g. ambulance) is provided if none of the nominated contacts can attend.

For the wellbeing check, the older person is required to register their wellbeing each day, generally between a fixed period of time; e.g. 7am–11am. If they do not check in by the end of the period, the service provider calls the older person. In most cases, the older person has simply forgotten to press the button. If they cannot be reached, a similar process as for raising an emergency is initiated.

**Modelling Task:**

Try to model the requirements for the personalised emergency system (PES) as detailed as possible, following AOM4STS methodology, starting from the goal model of the PES, followed by the domain model.

Feel free to ask us questions on modelling constraints.

Model the system requirements step by step following the system story. When modelling, try to freely interpret the requirements. There is no “right” or “expected” solution your models have to conform to.