Autotutor & Betty's Brain: Training learners in 'first aid'

Group A

Intelligent tutoring environment, consisting of

- virtual human-alike tutor,
- virtual patient(s) and
- the student

using

- virtual reality set,
- Autotutor Emotion Detection components,
- Rescue Anne doll with pressure, breathing and movement detection systems.

Tutor agent tries to adapt to both cognitive and affective state of the user. The tutor acts in all kinds of ways to maximise learning outcome, it should create the right emotional environment to both bring the student as close to the real world environment and to optimise their knowledge gain.

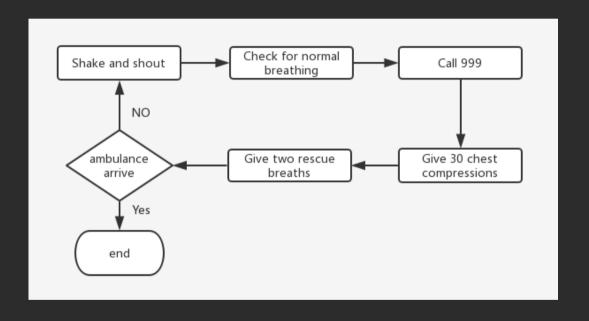
How the training system work (Autotutor Emotions)







How the training system work (Betty's Brain)



Why the approach is suitable for the task

- real-like virtual environments provide high quality imitation of an accident situation, which is a big factor interfering with the student's ability to apply the knowledge learned from a first aid demonstration,
- emotion control helps find a good balance between inducing a high stress scenario and maximising student's learning goals while keeping track of their mental comfort,
- Betty's Brain learning by teaching concept reinforces and promotes the organization of acquired knowledge,
- inspires students to pass on the knowledge which can be further optimised specifically for first aid instructors.

