1 Visual programming environment for engineers and non-programmers to jointly work on robot service design
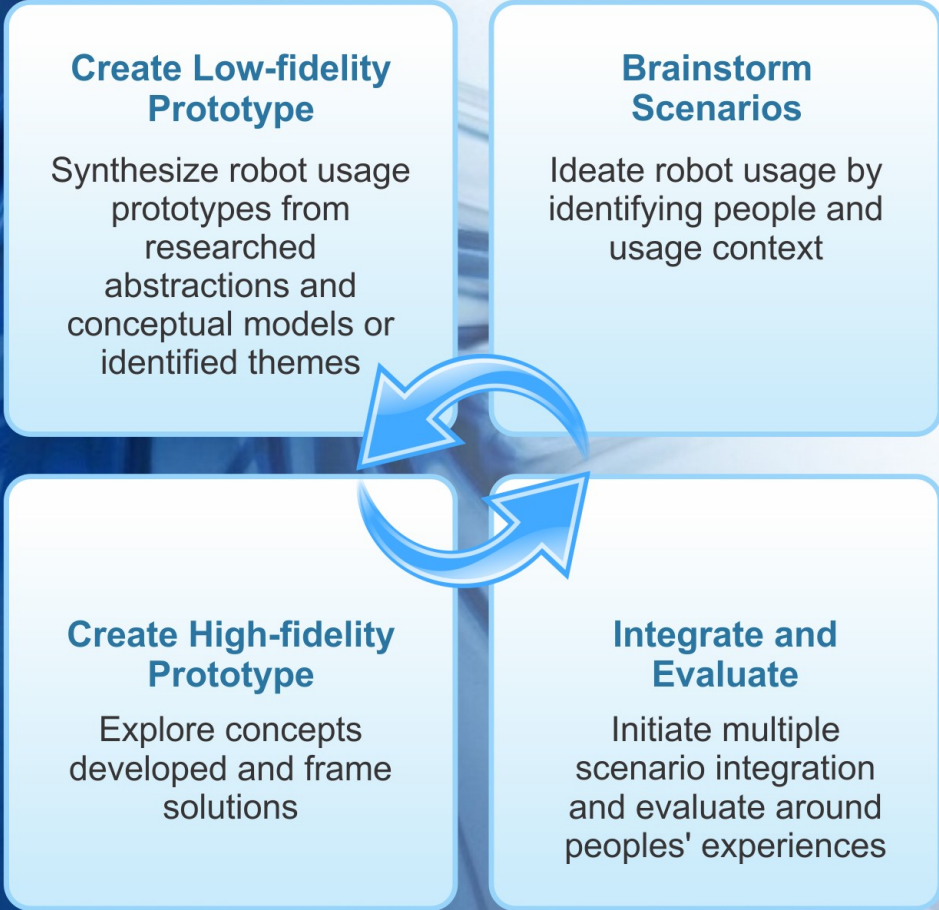
2 Lightweight and non-programmer installation friendly across there different platforms - Windows, Linux and Mac OS X

3 Provides a plug-in environment with flexibility for visual language developers to integrate their languages

Chandan Datta   chandan.datta@auckland.ac.nz   http://realworldrobotics.com

RoboDes is a process model that systematically allows details of service design requirements to be incorporated into the final robot software, thus revealing latent needs of the end-users in the early design phases of the development process.

Create Low-fidelity Prototype

Synthesize robot usage prototypes from researched abstractions and conceptual models or identified themes

Brainstorm Scenarios

Ideate robot usage by identifying people and usage context

Create High-fidelity Prototype

Explore concepts developed and frame solutions

Integrate and Evaluate

Initiate multiple scenario integration and evaluate around peoples' experiences

Figure: The robot enables maintaining the patient's wellness and takes a blood pressure measurement

Stage 1
Brainstorm scenarios

Figure: The robot can initiate communication with a nurse or caregiver if there a is problem with any medication

Figure: The robot uploads the patient medication intake data and vital signs measurement data to the

Figure : fidelity prototype of the robot's entertainment service

Stage 2
Low-fidelity prototype

Figure: Highfidelity prototype design of the robot's interaction using the Adobe Flash Catalyst CS5 development environment

Stage 3
Highfidelity prototype

Stage 4
Evaluation in a retirement village

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