Index

A
Activities of Daily Living (ADLs), 4, 11, 16, 18–19, 80, 176, 212, 225
instrumental, 16, 18–19, 25, 41, 118–119, 124, 158, 212
Agnosia, 16
Ambient Assisting Living (AAL), 28
Apraxia, 16, 117, 120
Assistive technology
electronic assistive technology, 69
electronic memory aids (EMAs), 44–45, 145–146
information security, 64, 68
privacy issues, 68
security issues, 9–10, 67–68
context reasoning, 134, 142
environments, 132–142
micro-environments, 135–136
prediction, 132, 134, 138–140, 142
quality of context (QoC), 134, 142
Continua Alliance, 231

D
Dementia
burden, 19–20, 52
chronic disease, 4, 30, 38, 165
clinical features, 15–20
dementia subtypes, 18
dementing illness, 91, 221
management of dementia, 20, 223
mild dementia, 4–6, 11, 17, 29, 31, 34, 38, 48–49, 56, 74, 79, 81–82, 97–98, 114–119, 122–126, 142, 147, 162, 182, 201, 205, 210, 215
prevalence, 15–20, 42
risk factors, 9, 19
Demographic ageing
Baby Boomers, 224, 229
demographic time-bomb, 4
Generation X, 224
Sandwich Generation, 224
Design process
bottleneck list, 231
descriptive analysis, 85–86
dynamic diversity, 172
evaluation, 199–201, 202, 205, 215
evaluation design, 199–201
field trials, 10–11
Fitts’ Law, 182
functional requirements, 10, 79, 81, 85, 96, 98
graphical user interfaces, 182
Hick’s Law, 182
human factors impact analysis, 82
interface design, 11, 165–186
practical issues, 191–195
prototypes, 205, 215–216
reminiscence scrapbook, 181–182
socially dependable design, 176–177
technical specification, 10, 101–111
use case, 105–107
user-centred design (UCD), 11, 103
user-participatory, 79, 81–82, 98–99
user requirements, 102, 184
user sensitive inclusive design (USID), 175, 184
waterfall methodology, 149
windows icon menu pointer (WIMP), 180, 182

E
Easy Line Plus, 27
eHealth, 51–53
Elite Care, 226–227
Ethics
consent, 64, 67, 69–73
dentological, 66
ethical authority, 82
ethical framework, 69–73
ethical issues, 10, 63–64, 66, 68, 71–72
macroethics, 65
microethics, 65
paternalism, 70–71
personal data, 64, 67–68
person centred approach, 70

G
Global Positioning Systems
Columba, 32–33
Keruve, 32–33

H
Health records
Electronic Health Record (EHR), 44
Electronic Medical Dossier (EMD), 44
Electronic Patient Dossier (EPD), 44
HL7, 231
Personal Health Record (PHR), 232

I
IEEE Wireless Sensor Working Group, 41, 53–54, 231
digital inclusion, 166
Information society, 7, 28, 51–52
Institutional care, 16, 43, 49, 63–64, 70–71, 176, 227
Instrumentation and Measurement Society, 231
Integrated Psycho-stimulation Program (IPP), 46
Interactive Multimedia Internet-based System (IMIS), 46
International Telecommunications Union, 231

M
Mantelzorglijn, 43
Measurement of dementia
CAMCOG, 83, 95
CANE, 83, 117, 212
Dementia Coping Scale, 116
experienced autonomy list, 83, 211–212
Global Deterioration Scale (GDS), 83, 87, 115, 214
Interview Deterioration in Daily Living in Dementia (IDDD), 116, 212
Jalowiec Coping Scale (JCS), 116, 213–214
Mastery Scale, 83
Mini Mental State Examination (MMSE), 115, 122, 146, 212–214
NDP25, 97
Practitioners Assessment of Network Type (PANT), 117, 214
Reiss’s 16 Motives, 86, 88
WHOQOL10022, 83
Medication compliance, 146
pillbox dispenser, 223–225
Mental health, 5, 19, 43, 88
MEZZO, 43

N
Neuropsychological testing, 19

P
Parkinson’s disease, 18, 118
Patient Access Electronic Record System (PAERS), 44
Personal Digital Assistant (PDA), 31–32, 34, 45, 50, 119, 142, 172, 229
Pervasive healthcare
activity assistance, 158–160
calendar, 91–92, 120
clock and day indicator, 120
door alarm, 121, 123, 161
DSL, 148, 230–231
electronic agenda, 45, 120–121, 123
emergency contact, 94, 122, 161–162
GPS-based navigation programme, 121
instrumental activity support, 121
item locator, 91, 97, 120
listening to music, 158, 209
media player function, 121
motivation towards eating, 158–159
night time wandering, 162
personalisation, 11
picture dialling phone, 97, 120, 212
prospective reminders, 155
reminders for appointments, 120
sensors, 121
tagging, 71, 146
WiMAX, 230
X10, 149, 159–160
XML, 149
Pharmacological, 20, 42, 46

Q

Quality of life
enjoyment of activities, 5, 88
mental health, 5, 88
physical health, 19, 118, 211, 215
self-determination, 5, 88
self-esteem, 5, 88, 211
social contact, 5, 88
Quality standards, 85
ISO 9126–1, 64

R

Research projects
AIBO, 49–50
ALADIN, 28
Alares, 28
Alzheimer’s Carer Internet Support System (ACISS), 48
Assisting Carers using Telematics Interventions to meet Older persons Needs (ACTION), 36, 46
ASTRID, 80–81, 114, 208
Cybrian, 174
DEM-DISC, 56
doc@home, 30
EMERGE, 31
ENABLE, 28–29, 45, 49, 52, 91, 93–94
Enabling Smart Houses, 27
Handy-phone, 51
INHOME, 28
Interactive Domestic Alarm System (IDAS), 172–173
MemoJog, 25
Memory Lanes, 49
MonAMI, 28
MORE, 25, 48–49
Net Neighbours, 177
NeuroPage, 25, 45
OLDES, 28
Opening Doors for Seniors, 227
Oregon Center for Aging & Technology (ORCATECH), 227
PEAT, 29
Proyecto Alzheimer, 227
SAFE21, 32
SAFE, 47
SafetyNet, 30
SeniorMail, 174
SHARE-it, 28
SIMAP, 32
Smartbrain, 26
SOPRANO, 30
Technology, Ethics and Dementia (TED), 45
TeleCARE, 30, 46, 53
Telematic Applications Supporting Cognition (TASC), 49, 53
Televisits, 29, 49
Usable Technology for Older People – Inclusive and Appropriate (UTOPIA), 172
RIVM, 43

S

Smart homes
ambient intelligence, 132–133
ambient technology, 225
collection aware home, 64–65
domotics, 225
intelligent environment, 132
pervasive computing, 225
smart environments, 132, 134–135, 167, 175
telecare, 64–65
telehealth, 46–47, 64
ubiquitous home, 64–65
State of the art, 8–9, 23–34, 39, 54, 180
Step Watch, 2

T

Tunstall, 28, 46

U

User need
remembering, 152–155
safety, 90
social, 89
support, 82, 86–90

Users
  centred design, 11, 101, 103, 162, 175, 180–181, 184
  identifying need, 79–99
  studies, 101–111
  unmet need, 152–153

V
Visuospatial processing, 18

W
Wander, 8, 31–32, 34, 46, 49–51, 53, 55, 70, 72, 162, 226
WristCare, 51