Tilt
- Pivot
  o Hinge
  o Platform
  o Bearings / Bushings
- Tilt Resistance
  o Compressible Bushings
  o Hydraulics / Pneumatics
  o Springs
  o Rubber Bands
  o Weighted Pulleys
  o Worm Gear
  o Electro-magnetic shocks
  o Gas Shocks
  o Airbags
- Tilt Level
  o Movable Bump Stops
  o Pin Lock Bump Stops
  o Worm Gears
  o Actuators
  o Bushing

- Steering – to correct bike tilt when turning
  o Pulley system
  o Electric
  o Hydraulic
  o Mechanical

Mount / Dismount
- Locked Position
  o Friction Lock
  o Movable Bump Stops
  o Robust Pin Lock
  o Lever?
- Bicycle to floor
  o Drive anchors
  o Legs
  o Wide base plate
  o Platform

Cross-member
- Stationary
  o Low Cross-member
  o Removable Seat
- Movable
  o Rotating
  o De-couple
  o Telescoping

Seat Height
- Sliding
  o Compression Clamp
  o Pin-lock
  o Hydraulic / Pneumatic
  o Worm Gear / Electric Screw
  o Crank Gear

Feedback System
- Sensors
  o Angular displacement
  o Accelerometer
  o Switch
  o Metal Sensor (key)
  o Pressure (hydraulic/pneumatic)
  o Electronic Eyes
  o Gyroscope
  o Digital Level
  o Force Sensor (hard stops)
  o Linear Sensor (need conversion)
  o Weight Sensors (on seat)

- Signal Processing
  o Micro-computer
  o Laptop → visual display
  o Processor?

- Auditory Feedback
  o Speaker

- Visual Feedback
  o LED’s
  o Incandescent Lights
  o Traffic Lights
  o Strobe Light

- Steering – to correct bike tilt when turning
  o Pulley system
  o Electric
  o Hydraulic
  o Electronics –sensor based
**Note: Should have limited correction factor**
We do not want the patient to be able to “cheat” via steering. Possibly only to correct when in “danger” zone back to safe leaning zone.

- Pedal
  - Mechanism
    - Shaft Driven
    - Belt
    - Chain
    - “Free Wheel”
    - Magnetic
  - Resistance
    - Gears
    - Fluid
    - Friction
    - Constant