WATERFALL MODEL

BLOOD PRESSURE MONITOR

REQUIREMENTS

1. HYPERTENSION
2. .EARLY DETECTION AND MONITORING
3. INDIVIDUALISED TREATMENT
4. HOME MONITORING
5. GUIDING LIFESTYLE CHANGES
6. CLINICAL DECISION MAKING
7. RESEARCH AND PUBLIC HEALTH

SYSTEM DESIGN

1. AERIAL PRESSURE FUNDAMENTALS
2. BLOOD FLOW AND RELATIONSHIP
3. PRESSURE SENSOR
4. ANALOG CIRCUIT
5. MICROCONTROLLER
6. DISPLAY
7. FREESCALE REFERENCE DESIGN
8. WIRELESS BLOOD PRESSURE MONITORING.

IMPLEMENTATION

1. OSCILLOMATRIC METHOD- OCCULDING CUFF IS PLACED ON THE ARM AND CONNECTED TO PRESSURE SENSOR.
2. PRESSURE AND PULSES CAPTURED AND OSCILLATIONS IN CUFF RECORDING

SYSTEM TESTING

1. RIGOROUS VALIDATION ENSURES ACCURACY AND RELIABILITY.
2. REGULAR CALIBRATION AND MAINTENANCE ARE CRITICAL FOR CONSISTENT PERFORMANCE..
3. RADAR TECHNOLOGY.

OPERATION

1. CALIBERRATION
2. PATIENT PREPARATION
3. CUFF PLACEMENT
4. INFLATION AND DEFLATION
5. RECORDING
6. RECORD SYSTOLIC AND DIASTOLIC PRESSURES ACCURATELY.

MAINTENANCE

1. PREVENTIVE MAINTENANCE.
2. EXAMINE CABLES AND STARIN RELEIFS.
3. CLEANING
4. STORAGE IN A DRY.COOL PLACE.
5. BATTERY MAINTENANCE.
6. SOFTWARE MAINTENANCE.
7. USER TRAINING.
8. REFER TO USER MANUALS AND GUIDES.