odometer

- distance: double
- aveSpeed:double
- currentSpeed:double
- wheelSize: double
- speedWeight : double
- sDate: unsigned int
- sTime: unsigned int
- timeElapsed: unsigned int
- dataPoints[10]: unsigned int
- speedPoints: unsigned int
- firstRun: BOOL
- noSpeed: BOOL

+ odometer()
+ setNewOdometerWOtime (double wheelSize) : void
+ setNewOdometerWtime(double wheelSize, unsigned int sDate, unsigned int sTime) : void
+ setOdometer(swapAveSpeed: double ,swapDistance: double , swapCurrentSpeed: double ,swapWheelSize: double,
      speedPoints: unsigned int, timeElapsed: unsigned int, sDate: unsigned int, sTime: unsigned int): void
+setWheelSize(wheelSize: double): void
+addSpeedDataPoint(newDataPoint: unsigned int): void
+ resetSpeedPoints(): void
+ getSpeedPoints(): unsigned int
+ getCurrentSpeed():double
+ getAverageSpeed(): double
+ getDistance(): double
+ getWheelSize(): double
+ getTotalTime(eTime: unsigned int, eDate: unsigned int): unsigned int
- updateSpeeds(): void
- resetOdometer(): void

heartMonitor

- aveHR: double
- currentHR: double
- hrWeight: double
- timeBetweenPoints: unsigned int
- lastInterval: unsigned int
- numReadings: unsigned int
- pulseThresh: unsigned int
- peak: unsigned int
- trough: unsigned int
- firstBeat: BOOL
- secondBeat: BOOL
- pulse: BOOL
- rate[10]: WORD

+ heartMonitor()
+ resetMonitor(): void
+ setHeartMonitor(aveHR: double, numReadings: unsigned int): void
+ setAveHR(aveHR: double): void
+ setNumReadings(numReadings: unsigned int): void
+ newHRSample(adcReading: WORD, timeSinceLast: unsigned int): void
+ getAveHR(): double
+ getCurrentHR(): double
+ getNumReadings(): unsigned int
- addNewBeat(): void

trip

+ trip()

myDate

- month: int
- day: int
- year: int
- dateString[17]: char

+ myDate()
+ myDate(month: int, day: int, year: int)
+ getMonths(): BYTE
+ getYears(): WORD
+ getDays(): BYTE
# addDays(days: int): void
- setMonth(month: int): void
- setDay(day: int): void
- setYear(year: itnt): void
- addMonths(months: int): void
- addYears(years: int): void

myTime

- hour: int
- minute: int
- second: int
- timeString[11]: char

+ myTime()
+ myTime(minute: int, second: int, hour: int)
+ myTime(hour: int, minute: int, second: int, day: int, month: int , year: int)
+ getSeconds(): BYTE
+ getMinutes(): BYTE
+ getHours(): BYTE
+ setTime(hour: int, minute: int, second: int): void
+ setTime(newTime: char *): BOOL
+ setSecond(second : int): void
+ addSeconds(seconds: int): void
+ getTime(): const char *
- addHours(hours: int): void
- addMinutes(minutes: int): void
- setHour(hour: int): void
- setMinute(minute: int): void