| BikePuter | (Think of cool name) | | | | | | |
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**REQUIREMENTS**

| | Sensing/Measurement | (Additional Info) | Power | (Additional Info) | User Interface | (Additional Info) | Physical Structure | (Additional Info) |
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| | * Stopwatch with current date/time display | Wall clock can be set by user and must stay set through reset/detachment from console. | * Last 1.5 hours | Battery must not be gigantic. If this can not be accomplished or will take too much time, we can relax to 1 hour MINIMUM. | * All features must be continuously running. Meaning, if the user is currently looking at the time, the odometer must till be ticking. | | * Main module must be able to attach to bike in an unobtrusive way. | Be it plastic molding, or sticky pads. |
| | * Speedometer/RPMs | Potentially log average speed. | * Chargable in 10hrs (Wall Socket) | If for safety reasons or project time constraints. This can be relaxed to 12hrs (half a day) minimum. | * All features must be able to be viewed at any time through a well designed graphical user interface. | | * Main module must be able to be detached from the bike to charge. The bike must be rideable still without the device attached. | |
| | * Odometer | Must have 'trips' feature and log. | * Power must be supplemented through the environment. | | * Must be able to switch between different "apps" | | * Must not require significant reconfiguration when reattaching. | A dock of some sort or a plug-n-play is ideal. |
| | * Heart Rate Monitor | Must be able to accomplish this in an unobtrusive way (either pads on handle bars or through camera). Must log to memory. | | | * Map | Does not have to very sophisticated or have any user input features. Do not waste time on this feature by adding routes. | * Must be suitable for outdoor usage | Waterproof enclosure, won't fail in heat/sun/humidity |
| | * Battery level | | | | * Must be able to dump trip data in a readable format of up to the last 20 hours of riding time into an attachable USB stick. | | | |
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