

# Progress Report 12

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## Team: Physiologic Metronome (Group 6)

### Team Members:

Ben Fleming, *Communicator*  
Cole Drifka, *BWIG*  
Jeff Theisen, *BSAC*  
Adam Pala, *Team Leader*

**Week:** November 27, 2009 – December 3, 2009 (Week 13)

### Client: Dr. Bill Fahl

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UW School of Medicine and Public Health  
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### Advisor: Dr. Paul Thompson

Department of Biomedical Engineering  
UW College of Engineering  
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### Problem Statement

The purpose of this design project is to develop a metronome device which will maintain a constant, adjustable tempo for the practicing musician. A key feature that the client requires is that the device's tempo-maintaining mechanism be inaudible. Such a feature allows the musician to practice and improve musical performance using a more intuitive approach—one that does not distract the musician while playing music (i.e. audible ticks, as used in conventional metronomes).

### Goals from Last Week

- To finish construction of device
- To make accurate tick marks for the knob/potentiometer user interface
- To get ready for the presentation

### Accomplishments

- The device construction was completed
- The poster presentation was completed

### Goals for This Week

- To work on and complete all course deliverables

### Difficulties

- None in particular

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### Team Contributions (note these include the hours from the previous week as well)

<i>Team Member</i>	<i>Task(s) Accomplished</i>	<i>Time Spent (Hours)</i>	<i>Cumulative Time Spent (Hours)</i>
Ben Fleming	Prototype construction, device testing, poster	20	58
Cole Drifka	Prototype construction, specifically the mode of attachment and all other aspects of design	20	58
Jeff Theisen	Prototype construction, specifically the user interface, device testing	24	65
Adam Pala	Prototype construction, device testing, poster	20	55

### Tentative Project Timeline

		<i>September</i>			<i>October</i>					<i>November</i>			<i>December</i>			
		11	18	25	2	9	16	23	30	6	13	20	4	11		
<b>Product Research and Development</b>	Preliminary Research															
	Brainstorm															
	Decision Matrix															
	Final Design															
	Building of Prototype															
	Testing of Prototype															
<b>Due</b>	PDS															
	Presentations															
	Reports							21								

### Current Expenses

- \$61.57 – miscellaneous electronics parts, solenoids