WEARABLE CIGARETTE SMOKE SENSOR

TEAM 4
GOAL

• A wearable device that:
  • Notifies the user when cigarette smoke gets too much.

• The goal is to reduce the number of casualties to passive smokers.
According to the World Health Organization, worldwide approximately 5 million people die yearly from smoking. In the United States the number of smoking-related deaths from 2000 to 2004 was 443,000, of which 49,000 were estimated to be from secondhand smoke.

sharecare
FLOW PROCESS

- DESIGN THINKING
- MAKE ELECTRONICS
- MAKE WEARABLE
- PACKAGING
- FINAL TESTING
ARDUINO CODE FLOW

START (POWER UP ARDUINO) → INITIALIZATION, DECLARATION AND SETUP → SMOKE SENSOR CHECKS FOR SMOKE LEVEL

IS SMOKE LEVEL ABOVE THRESHOLD? [NO]

LOG TIME AND SMOKE LEVEL IN SD CARD

GET TIME FROM RTC (REAL TIME CLOCK)

BEEP THE BUZZER [YES]
<table>
<thead>
<tr>
<th>DELIVERABLE</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Smoke detection</td>
<td>95%</td>
</tr>
<tr>
<td>2. Logging time in SD Card</td>
<td>100%</td>
</tr>
<tr>
<td>3. Combining 1 and 2</td>
<td>95%</td>
</tr>
<tr>
<td>4. Testing for and fixing bugs</td>
<td>90%</td>
</tr>
<tr>
<td>5. Allowing 3rd party to test</td>
<td>70%</td>
</tr>
<tr>
<td>6. Start working on packaging</td>
<td>95%</td>
</tr>
<tr>
<td>7. Sowing, Gluing, Cutting, …….</td>
<td>95%</td>
</tr>
<tr>
<td>8. Bringing everything together</td>
<td>95%</td>
</tr>
</tbody>
</table>
SKETCH VS ACTUAL
ELECTRONICS
PACKAGING STAGE
Final Design
THANK YOU