| Category       | Beginning   | Developing  | Proficient   | Exceptional   |
|----------------|---|---|--|---|
| Project design | No clear purpose of project or organization  Does not provide a way for other people to interact with program                 | Has some sense of purpose<br>and structure  Includes way for user to interact<br>with program, may need to<br>be clearer or fit program's<br>purpose better | Has clear purpose, makes<br>sense, has structure<br>Includes way for user to<br>interact with program and<br>clear instructions  | Clear well communicated design User interface fits content well, is complex; instructions are well-written and integrated into design   |
| Programming    | Project shows little understanding of code and how they work together Lacks organization and logic Has several bugs           | Project shows some understanding of code and how they work together Has some organization and logic May have a couple bugs                                  | Project shows understanding of code and how they work together to meet a goal Is organized, logical, and debugged  | Project shows advanced understanding of code and procedures  Uses additional programming techniques  Is particularly well organized, logical, and debugged  |
| Process        | Student did not get involved in design process  Did not use project time well and did not meet deadlines  Did not collaborate | Student tried out the design process and made some changes Used project time well some immes and met some deadlines Collaborated at times                   | Student used design process<br>(stated problem, came up<br>with ideas, chose solution,<br>built and tested, presented<br>results) Made changes in<br>design<br>Used project time<br>constructively, met<br>deadlines<br>Collaborated appropriately | Student made significant use of the design process, all changes recorded thoroughly.  Used project time constructively, finished early or added additional elements  Found ways to collaborate beyond class structure |