Motivation

- Vignettes are short, animated stories derived from real life situations which allow students of all ages to analyze various situations
- Creating vignettes is relatively costly in terms of time and resources since it is done by web designers
- Middle school students do not have a natural environment to describe their situations
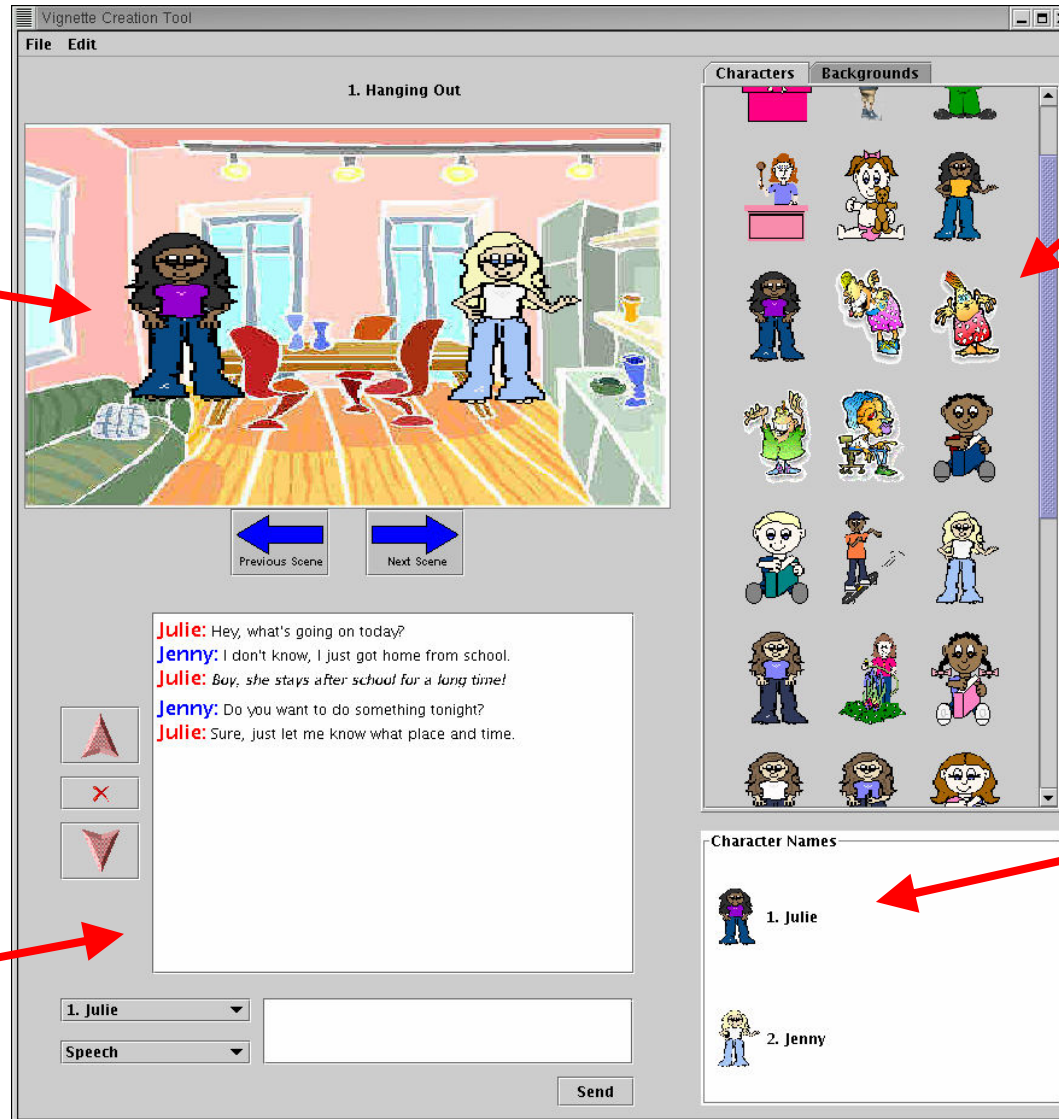- Students need experience using technology

Project Goals

- Allow vignettes to be created quickly, easily and directly by the user
- Create a non-threatening environment for middle school students (ages 12-15) to describe their experiences
- Give students experience using technology productively
- Develop a system that is extendible to a web interface, easy to setup and cost-effective for public schools

Interface

- Created separate tools to create and play vignettes

- Uses drag and drop to create scenes

- Chat interface for dialog gives students intuitive input mechanism

- Developed using Java Swing 1.4 and FreeTTS (Text-To-Speech) which are all freely available and easy to setup

Screenshot of Vignette Creator

Character/
Background
Selections

Current
Vignette
Scene

Character
Name/
Image

Chat
Interface

User Testing

- Users given a vignette of 3 scenes to create and edit followed by a brief survey and open-ended questions

- Took the users 12-20 minutes to complete task

- Survey indicated the chat interface is a very effective input mechanism

- Users thought the overall interface is decent for middle school students

Lessons Learned

- Make common tasks as direct as possible
  - Double clicking on characters to change name was most difficult task
- Provide cues as to what actions are possible for objects
  - Users had to learn what properties could be modified for characters by trial-and-error
- Not everyone likes drag and drop
  - A few users wanted alternate methods of object placement
- The chat interface still needs work
  - If users are typing a lengthy dialog, switching the active speaker can be tedious

Tools for Middle School Students to Create Vignettes

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Future Work

- Test with middle school students
- Incorporate a sketching interface for the tool to allow users to create their own characters, backgrounds and animations
- Use more animation in vignette player (e.g., lips moving to denote the speaker)
- Allow multiple characters per scene
- Give user more control over character locations in a scene
- Enable voice selection of characters
- Create an applet for users to create and view vignettes over the Internet
- Incorporate networking into the creation tool so users can collaborate remotely

User Survey Results

	Question					
	1	*2*	*3*	*4*	*5*	*6*
User 1	A	A	A	SA	SA	SA
User 2	SA	SA	A	A	SA	SA
User 3	A	A	A	SA	A	SA
User 4	A	A	SA	SA	A	SA
User 5	A	D	D	SA	A	SA

Table 1: User Survey Results

- Is the interface well-designed for middle school students?
  - Mean = 4.0, StdDev = 0.816
- Is the tool intuitive and easy to use?
  - Mean = 4.1, StdDev = 0.876
- Is the chat interface beneficial to the tool?
  - Mean = 4.9, StdDev = 0.316