

Sprint 3 Plan | Trace.js

Completion date: 2/15/15 | Revision 0.0.1, 2/23/15

Goal

Getting the application ready for release. Main objectives include finishing implementing Whitted Ray Tracing, adding more geometric shapes, hooking up UI functionality, and launching the application on a public server.

User Stories

- As a developer, I want a Whitted class that extends Tracer so that we can implement whitted ray tracing.
- As a developer, I want a Reflective class that extends Phong Material so that we can have reflective objects.
- As a user, I want to be able to specify the type of surface that objects in the scene have so that I have more options for how a scene is viewed.
- As a user, I want to be able to specify the type of light in our scene so that I have more options for how I view a scene.
- As a user, I want to be able to specify the Camera viewing method so that I have options for how I view a scene.
- As a developer, I want to implement shadow casting in existing hit points so that scenes can contain shadows.
- As a user, I want to be able to turn shadows on and off so that I can trace scenes with or without shadows.
- As a developer, I want a Plane class that extends GeometricObject so that we can specify Planar shapes in a scene.
- As a developer, I want a Triangle class that extends GeometricObject so that we can specify Triangle shapes in a scene.
- As a developer, I want a Torus class that extends GeometricObject so that we can specify Torus shapes in a scene.
- As a user, I want to be able to add a GeometricObject to a scene.
- As a user, I want to be able to specify the location of a given GeometricObject within a scene.
- As a user, I want to be able to save a scene in a known image format to my computer so that I can view it later.
- As a developer, I want a Trace.js landing page so that a user has a starting point when they access the application.
- As a user, I want to be able to visit a public web page with Trace.js so that I can build and trace a scene.

Team Roles

Chris Camargo: Tracer developer, web developer
Steven Esser: Tracer developer, web developer
Shahar Zimmerman: Tracer developer, web developer
Katherine Barsaloux: Tracer developer
John Haytko: Tracer developer, Scrum Master for this sprint

Initial Task Assignment

Chris Camargo: Whitted Ray Tracing, UI
Steven Esser: Geometric Object Definitions
Shahar Zimmerman: UI Implementations
Katherine Barsaloux: Geometric Object Definitions
John Haytko: Geometric Object Definitions

Scrum Times

Mondays at 8pm and Fridays at 4pm