# Progress Report for Better Graphics For A Robotics Grasping GUI

# **Shady Robots**

Group 12

Justin Bibler

**Matthew Huang** 

**Daniel Goh** 

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**Abstract:** This document goes over the project our project's purpose and goal, as well as providing an update on our team's progress with the project. The retrospective section details the positives, deltas, and actions of each week, which will be used from here on out to allow the team to reflect and improve for the remainder of the project timeline.

**Keywords:** OpenInventor, OpenGL, OpenRave, shaders, warm cool shaders, silhouettes, shadows, robotic simulation, geometry, visualization, render, vertex lines, retrospective, positive, delta, action

#### 1 PROJECT PURPOSE AND GOALS

### 2 WHERE WE ARE IN THE PROJECT

Our performance metrics for measuring our project's success has been briefly defined in our problem statement document, however they are not fully fleshed out in our requirements document. We will be revisiting and updating the requirements document as needed. Also, the lack of available documentations on our project's implementation happened to be a wall that is required for us to break down. We will need to look further into the source code to fully understand the undocumented implementation. Besides that, we have a good understanding of the project as a whole and what is required of us throughout the project.

- 3 PROBLEMS AND SOLUTIONS
- 4 INTERESTING PIECES OF CODE

## 5 RETROSPECTIVE

TABLE 1

Table showing what went right (Positives), what needs to be changed (Deltas), and implementations to fix said Delta (Actions)

Positives	Deltas	Actions
Week 2: Met up with our client to intro-	No new deltas were introduced this week.	No new deltas.
duce ourselves and got an overview and		
the requirements of the the project.		
Week 3: Met our TA, Nels, and got a better	We missed out our team's GitHub wiki	We will be more attentive of the task as-
understanding of what is expected of us	post for Week 3.	signed to us in the future.
throughout this term.		
Week 4: Revised problem statement based	No new deltas were introduced this week.	No new deltas.
on Kevin's feedback. Learned of the exis-		
tence of IEEE documents, specifically the		
IEEE 830-1998 document that is used to		
write about a project's requirements.		
Week 5: Justin participated in the robot	The lack of ideas to flesh out the require-	We will learn better time management
grasping study, we completed a rough	ments document made it hard for us to	skills and start working on documents
draft of the requirements document, and	write out the document itself. The draft	or action items as soon as possible. This
came up with our team name, Shady	for the requirements document was done	will give us a breathing space to consult
Robots.	a day before the due date. Because of start-	our instructors when we are stuck on a
	ing late, we were not able to get input from	document and get feedback from our in-
	Kevin, Kirsten or Nels regarding the state	structors to improve the document before
	of the draft.	submitting it.
Week 6: We further revised problem state-	Our requirements document is small, and	We will be revising the requirements docu-
ment, finished requirements document,	in our opinion poorly written.	ment next term, we will not be taking any
Matt an Daniel participated in the robot		requirements out, and we will most likely
grasping study, and we received help from		add in a few more requirements if we feel
Kirsten and Nels for our requirements doc-		that they are necessary.
ument and problem statement		
Week 7: Final version of problem statement	No new deltas were introduced this week.	No new deltas.
was finished, user interviews were intro-		
duced into our project as a new require-		
ment, requirements document was edited		
further, and received input for Gantt chart		
and tech review topics.		