Appendix I - Main Class Composition Relations com.mygdx.game.engine.lifecycle (C) Main Main instance ScreenManager screenManager Preferences prefs SoundManager soundManager EntityManager entityManager SpriteBatch batch BitmapFont font o int HEIGHT o int WIDTH Main getInstance() ScreenManager getScreenManager() void setScreenManager(ScreenManager) SoundManager getSoundManager() void setSoundManager(SoundManager) SpriteBatch getBatch() void setBatch(SpriteBatch) BitmapFont getFont() void setFont(BitmapFont) Preferences getPrefs() void setPrefs(Preferences) void create() void render() void dispose() has has has com.mygdx.game.engine.screen (**c**) ScreenManager ArrayList<String> storyboardImgPath ArrayList<String> planetVisitImgPath ArrayList<StoryboardScreen> storyboards ArrayList<StoryboardScreen> visitPlanetStoryboards com.mygdx.game.engine.sound com.mygdx.game.engine.entity □ MainMenuScreen mainMenuScreen PauseScreen pauseScreen (C) SoundManager GameOverScreen gameOverScreen (c) EntityManager □ ScoreboardScreen scoreboardScreen Music menuMusic □ ControlScreen controlScreen ArrayList<CollidableEntity<Player>> players Music gameMusic □ ArrayList<CollidableEntity<Asteroid>> asteroids □ GameScreen gameScreen Music controlMusic Main game ArrayList<CollidableEntity<UFO>> UFOs Music scoreMusic □ ArrayList<CollidableEntity<Planet>> planets ArrayList<String> getStoryboardImgPath() Music pauseMusic String[] availablePlanets void setStoryboardImgPath(ArrayList<String>) Music storyMusic Main game ArrayList<String> getPlanetVisitImgPath() Sound buttonHover ArrayList<CollidableEntity<Planet>> getPlanets() void setPlanetVisitImgPath(ArrayList<String>) Sound buttonClick void setPlanets(ArrayList<CollidableEntity<Planet>>) ArrayList<StoryboardScreen> getStoryboards() Sound laserPew String[] getAvailablePlanets() void setStoryboards(ArrayList<StoryboardScreen>) □ Sound enemyLaserPew ArrayList<StoryboardScreen> getVisitPlanetStoryboards() void setAvailablePlanets(String[]) boolean isPlaying ArrayList<CollidableEntity<Asteroid>> getAsteroids() void setVisitPlanetStoryboards(ArrayList<StoryboardScreen>) void playMusic(ScreenType) void setAsteroids(ArrayList<CollidableEntity<Asteroid>>) void setMainMenuScreen(MainMenuScreen) void stopMusic() ArrayList<CollidableEntity<Player>> getPlayers() void setPauseScreen(PauseScreen) boolean isPlaying() void setPlayers(int,int) void setGameOverScreen(GameOverScreen) void playButtonHover() ArrayList<CollidableEntity<UFO>> getUFOs() void setScoreboardScreen(ScoreboardScreen) void playButtonClick() void resetFailingObjects() void setControlScreen(ControlScreen) void playLaserSound() ArrayList spawnEnemy(String) void setGameScreen(GameScreen) void playEnemyLaserSound() void spawnPlanets() void instantiateScreens() void dispose() MainMenuScreen getMainMenuScreen() PauseScreen getPauseScreen()

GameOverScreen getGameOverScreen()ScoreboardScreen getScoreboardScreen()

void createScreenButtons(int,ArrayList<Button>,float,ArrayList<String>)ArrayList<StoryboardScreen> generateStoryboards(ArrayList<String>,String)

ControlScreen getControlScreen()GameScreen getGameScreen()