Life Cycle Plan (LCP)

LiveRiot Video Editing System and social networking enhancement

Team 04

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Version History

| Date | Author | Version | Changes made | Rationale |
|----------|------------------------|---------|---|---------------------------------|
| 09/25/13 | Yang Li | 1.0 | Original for CSCI577; Tailored from ICSM OCD Template | • To fit CS577 course content |
| 10/13/13 | Yang Li, Haishan Ye | 1.1 | • Modified Section 1, 2, 3, 4, 5 | Completion of Exploration Phase |
| 10/22/13 | Yang Li | 2.0 | • Modified Section 5, Add Section 6.1 | Plan for the development |
| 12/01/13 | Yang Li | 2.1 | Add all sections | • |
| 12/08/13 | Yang Li | 2.2 | Correct few error | • |

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1 Introduction

1.1 Purpose of the LCP

LCP helps stakeholders to identify tasks in the project and their corresponding timelines. It also helps to point out the roles and skills of members of developer team and describe the complete strategy, artifacts and responsibilities of everyone in the project.

According to the ISCM, every iteration and phase has to be planned and identified before actions are taken. LCP will guide and plan each phase.

Efforts, resources and schedule will be estimated with COCOMO and the results will be listed in LCP.

1.2 Status of LCP

This is the LCP at the Foundation Commitment Package phase (Draft FC Package), with a version number 1.1. This version has removed defects of pervious version and added responsibilities and resources.

For the FC package, this version has set milestones and artifacts each phases, created more detailed and context-related responsibilities & skills and estimated resources.

1.3 Assumptions

- The duration of the project is 12 weeks (Fall 2013)
- There are six on-campus students and a DEN student in the project team
- There will be team meeting and meeting with clients to discuss the progress of the project
- ICSM is being used to guide this project

2 Milestones and Products

2.1 Overall Strategy

The LiveRiot video editing system and social networking enhancement project developed by team 04 will process according to Incremental Commitment Spiral Model. This system is part of the whole program of LiveRiot to build a website as well as an app on iPhone, which provide a platform for people to edit and share videos and audios.

Exploration phase

Duration: 09/13/13- 09/27/13

Concept: In this phase the team focuses on analyzing the requirements of clients and understanding the current system. The develop team would meet clients to discuss the initial

scope and operational scopes.

Deliverables: Valuation Commitment Package **Milestone**: Valuation Commitment Review **Strategy**: One Incremental Commitment Cycle

Valuation phase

Duration: 09/28/13- 10/16/13

Concept: In this phase, the team had two win-win negotiation sessions to identify the win conditions, analyze the detailed requirements, evaluate the risks and prioritize the requirements. After the needs of the clients were clarified and confirmed, certain requirements with comparatively high risks were chosen to be prototyped, in order to control the risks. The prototype included basic UI design and a simple functional real device demo.

Deliverables: Draft Foundations Commitment Package, Project Effort Reports, Progress

Reports, Prototype Report, System and Software Architecture Description **Milestone**: Architecture Review Boards Foundations Commitment Review

Strategy: Incremental Commitment Cycles for Architected Agile, Meetings, Prototypes

Foundations phase

Duration: 10/17/13- 10/31/13

Concept: In this phase, the team will assess the project status. The changes in requirements will be analyzed, and corresponding adjustments will be made. NDI components will be assessed and development software architecture will be designed. Besides, actual functional prototypes will be built.

Deliverables: Development Commitment Package **Milestone**: Development Commitment Review

Strategy: Incremental Commitment Cycles for Architected Agile, Meetings, Prototypes

Development phase – Construction Iteration

Duration: 11/1/13- 11/30/13

Concept: In this phase, a detailed project plan is created. Architectural design of the system will be used to guide the development process. Development team will implement the system

based on the previous prototype. Regular meetings will be held to assess the current risks. Test team will test the current project and core capability drive-through will be performed at the end of this phase.

Deliverables: Transition Readiness Review Package

Milestone: Transition Readiness Review

Strategy: Incremental Commitment Cycles for Architected Agile, Development, Tests,

Integrations

Development phase – Transition Iteration

Duration: 12/1/13- 12/10/13

Concept: By this phase, the complete and developed system should be ready. Training will be provided. Development team will provide a training plan, and document a detailed user manual. And the functioning software system will be transitioned.

Deliverables: Operational Commitment Review Package

Milestone: Operational Commitment Review

Strategy: Incremental Commitment Cycles for Architected Agile, Transition, Training

2.2 Project Deliverables

2.2.1 Exploration Phase

Table 1 Artifacts Deliverable in Exploration Phase

| Artifact | Due date | Format | Medium |
|---|-----------------|------------|------------------|
| Client Interaction Report | 09/20/2013 | .doc, .pdf | Soft copy |
| Valuation Commitment Package: Operational Concept Description (OCD) Early Section Life Cycle Plan (LCP) Early Section Feasibility Evidence Description (FED) Early Section | 09/27/2013 | .doc, .pdf | Soft copy |
| Bugzilla report | Every Wednesday | Text | Bugzilla Website |
| Project Plan | Every Wednesday | .mpp | Soft copy |
| Progress Report | Every Wednesday | .xls | Soft copy |

2.2.2 Valuation Phase

Table 2 Artifacts Deliverable in Valuation Phase

| Artifact | Due date | Format | Medium |
|---|-----------------|-------------------------|---------------------|
| Draft Foundations Commitment Package: Operational Concept Description (OCD) Feasibility Evidence Description (FED) Life Cycle Plan (LCP) System and Software Architecture Description (SSAD) Prototype report (PRO) | 10/16/2013 | .doc, .pdf | Soft copy |
| Evaluation of Draft Foundations Commitment Package | 10/17/2013 | .doc, .pdf, Bugzilla | Soft copy, Bugzilla |
| Response to Evaluation of Draft Foundations Commitment Package | 10/17/2013 | .doc, .pdf, Bugzilla | Soft copy, Bugzilla |
| Foundations Commitment Package: Operational Concept Description (OCD) Feasibility Evidence Description (FED) Life Cycle Plan (LCP) System and Software Architecture Description (SSAD) Prototype report (PRO) System and Software Requirements Definition | 10/212013 | .doc, .pdf | Soft copy |
| Evaluation of Foundations Commitment Package | 10/22/2013 | .doc, .pdf, Bugzilla | Soft copy, Bugzilla |
| Response to Evaluation of Foundations Commitment Package | 10/22/2013 | .doc, .pdf, Bugzilla | Soft copy, Bugzilla |
| Bugzilla report | Every Wednesday | Text | Bugzilla Website |
| Project Plan | Every Wednesday | .mpp | Soft copy |
| Progress Report | Every Wednesday | .xls | Soft copy |

2.2.3 Foundation Phase

Table 3 Artifacts Deliverable in Foundation Phase

| Artifact | Due date | Format | Medium |
|--|-----------------|-------------------------|---------------------|
| Development Commitment Package: Operational Concept Description (OCD) Feasibility Evidence Description (FED) Life Cycle Plan (LCP) System and Software Architecture Description (SSAD) Prototype report (PRO) Quality Management Plan (QMP) Test Plan (TP) Iteration Plan (IP) | 10/23/2013 | .doc, .pdf | Soft copy |
| Evaluation of Development Commitment Package | 10/29/2013 | .doc, .pdf, Bugzilla | Soft copy, Bugzilla |
| Response to Evaluation of Development Commitment Package | 10/29/2013 | .doc, .pdf, Bugzilla | Soft copy, Bugzilla |
| Bugzilla report | Every Wednesday | Text | Bugzilla Website |
| Project Plan | Every Wednesday | .mpp | Soft copy |
| Progress Report | Every Wednesday | .xls | Soft copy |

2.2.4 Development Phase

Table 4 Artifact Deliverable in Development Phase

| Artifact | Due date | Format | Medium |
|-------------------------------------|------------|------------|-----------|
| Draft Transition Readiness Package: | 12/02/2013 | .doc, .pdf | Soft copy |
| Operational Concept | | | |
| Description (OCD) | | | |
| Feasibility Evidence | | | |
| Description (FED) | | | |
| • Life Cycle Plan (LCP) | | | |
| System and Software | | | |
| Architecture Description | | | |
| (SSAD) | | | |
| • Test Plan (TP) | | | |
| • Iteration Plan (IP) | | | |

| User manual (UM)Training Material (TM) | | | |
|---|-----------------|------------|------------------|
| Transition Readiness Package: | 12/09/2013 | .doc, .pdf | Soft copy |
| Operational Concept | | 1 | 13 |
| Description (OCD) | | | |
| Feasibility Evidence | | | |
| Description (FED) | | | |
| • Life Cycle Plan (LCP) | | | |
| System and Software | | | |
| Architecture Description | | | |
| (SSAD) | | | |
| • Prototype report (PRO) | | | |
| Quality Management Plan | | | |
| (QMP) | | | |
| • Test Plan (TP) | | | |
| • Iteration Plan (IP) | | | |
| • User manual (UM) | | | |
| Training Material (TM) | | | |
| Bugzilla report | Every Wednesday | Text | Bugzilla Website |
| Project Plan | Every Wednesday | .mpp | Soft copy |
| Progress Report | Every Wednesday | .xls | Soft copy |

3 Responsibilities

3.1 Responsibilities by Phase

Table 5: Stakeholder's responsibilities

| Name/Role | Exploration | Valuation | Foundations | Development- Construction Iteration | Development- Transition Iteration |
|--------------------|----------------------|-------------------|-------------------|---|---|
| Name: | Primary | Primary | Primary | Primary | Primary |
| LiveRiot | Responsibility | Responsibility | Responsibility | Responsibility | Responsibility |
| | - Explain scope | - Assess work | - Provide | - Test system | - Accept the |
| Role: | and primary | artifacts and | feedback for | development | training |
| Client | requirement | provide feedback | prototypes | modules | - Prepare for |
| | - Contribute to the | - Identify shared | | - Provide feedback | system transition |
| | win conditions | vision, goal, and | | of system features | |
| | - Clarify the | concepts | | | |
| | problems from | | | | |
| | development team | | | | |
| Name: | Primary | Primary | Primary | Primary | Primary |
| Yang Li | Responsibility | Responsibility | Responsibility | Responsibility | Responsibility |
| | - Plan the project | - Create detail | - Record Project | - Record Project | Manage client |
| Role: | - Plan the schedule | project plan | progress | progress | interaction |
| Project manager | - Contact clients | - Record project | - Create detailed | - Modify detailed | Deliver final |
| Life cycle planner | - Manage client | individual effort | project plan- | project plan | project artifacts |
| | interaction | - Record project | Manage client | - Develop system | |
| | | progress | interaction | - Manage client | |
| | Secondary | - Create and | | interaction | |
| | Responsibility | follow action | Secondary | | |
| | - Plan project life | items | Responsibility | | |
| | cycle phases | - Manage client | - Create life | | |
| | - List deliverables | interaction | cycle plan | | |
| | - Identify | | - Assess life | | |
| | responsibilities and | Secondary | cycle content | | |
| | skills of team | Responsibility | - Create detail | | |
| | members | - Identify | project plan | | |
| | | responsibilities | | | |
| | | and skills | | | |
| Name: | Primary | Primary | Primary | Primary | Primary |
| Haoyu Huang | Responsibility | Responsibility | Responsibility | Responsibility | Responsibility |
| D 1 | - Assess the risks | - Access and | - Define | - Identify test plan | - Test system |
| Role: | of the project plan | evaluate NDI and | technology- | and procedures | |
| Feasibility | - Mitigate risks | NCS components | independent | - Test system | |
| Engineer | Casardan | candidates | architecture | Casandan | |
| System Architect | Secondary | Caranda | - Define | Secondary | |
| | Responsibility | Secondary | technology- | Responsibility | |
| | - Explore current | Responsibility | dependent | -NA | |
| | system design | - Analyze | architecture | | |
| | | business case | - Specify | | |
| | | - Assess and | architecture | ĺ | |

| | | evaluate NDI and NCS components candidates | styles, patterns and frameworks - Create system and software architecture description - Assess system architecture - Create UML Model | | |
|---|---|--|---|---|---|
| Name: Ye Tian Role: Operational Concept Engineer Prototyper | Primary Responsibility -Plan project life cycle phases - List deliverables and team members -Identify responsibilities and skills Secondary Responsibility -Identify system modules and functionality - Design prototype | Primary Responsibility - Analyze current system - Identify shared vision - Establish new operational concept - Identify organizational and operational transform Secondary Responsibility - Analyze and prioritize capabilities to prototype - Prepare development / production environment - Develop prototype | Primary Responsibility - Create operational concept description - Assess operational concept Secondary Responsibility - Analyze and prioritize capabilities to prototype - Develop Prototype - Access prototype and components - Fix defects | Primary Responsibility - Develop system Secondary Responsibility - System development | Primary Responsibility - Develop system - Fix defects |
| Name: Zichuan Wang Role: Operational Concept Engineer Prototyper | Primary Responsibility - Review the work products/ deliverables - Shaper of project plan - Provide evaluation of work products Secondary Responsibility - Provide quality control on documents | Primary Responsibility - Analyze and prioritize capabilities to prototype - Prepare development / production environment - Develop prototype Secondary Responsibility - Analyze current system - Identify shared | Primary Responsibility - Analyze and prioritize capabilities to prototype - Develop Prototype - Access prototype and components - Fix defects Secondary Responsibility - Create operational concept | Primary Responsibility - Develop system Secondary Responsibility - Test modules during development and record test case results - Ensure module code modifications are done based on test case results | Primary Responsibility - Develop system - Fix defects |

| Name: Haishan Ye Role: Requirement Engineer Life Cycle Planner | Primary Responsibility - Identify the system concept - Develop vision and usage - Analyze current system Secondary Responsibility - Explore system design - Modeling of | vision - Establish new operational concept - Identify organizational and operational transform Primary Responsibility - Capture and score MMF and win-conditions - Capture progress of win-win negotiation Secondary Responsibility - Identify responsibilities | description - Assess operational concept Primary Responsibility - Identify system and software requirements definition Secondary Responsibility - Create life cycle plan - Assess life cycle content | Primary Responsibility - Develop system Secondary Responsibility - Assess system architecture and monitor alignment of system development with system architecture | Primary Responsibility - Develop system - Fix defects |
|--|--|--|--|---|---|
| Name: | product workflow Primary | and skills Primary | - Create detail project plan Primary | Primary | Primary |
| Kaiqi Zhang | Responsibility -Identify system | Responsibility - Analyze | Responsibility - Document | Responsibility - Identify test plan | Responsibility - Test system |
| Role: Feasibility Engineer System Architect | modules and functionality - Design prototype Secondary Responsibility -Plan project life cycle phases - List deliverables and team members -Identify responsibilities and skills | business case - Assess and evaluate NDI and NCS components candidates Secondary Responsibility - Access and evaluate NDI and NCS components candidates | feasibility evidence description - Assess feasibility evidence | and procedures - Test system | |

3.2 Skills

| Team members | Role | Skills |
|-----------------|-------------------------------------|--|
| Yang Li | Project Manager, Life Cycle Planner | Current skills: - Languages: C/C++, HTML, PHP - Website development - Schedule management Required skills: - Project planning - Progress controlling - Coordinating whole team |

| | | - iOS development |
|--------------|---|---|
| | | - COCOMO II |
| | | Current skills: |
| | | - Languages: Java, C/C++, JavaScript |
| | | - Website development |
| | | Required skills: |
| Haoyu Huang | Feasibility Engineer, System Architect | - UML |
| | | - System analysis |
| | | - Architecture design |
| | | - Feasibility and risk analysis |
| | | Current skills: |
| | | - Languages: Objective-C, C |
| | Operational Concept Engineer, | - iOS Development |
| Ye Tian | Prototyper | Required skills: |
| | 110000, p 41 | - Clear concept of the whole project |
| | | - Design and modeling |
| | Operational Concept Engineer, | Current skills: |
| | Prototyper | - Languages: Objective-C, Ruby |
| | 110000, p 41 | - Ruby on Rails |
| | | - Font-end development |
| Zichuan Wang | | - Interface Design |
| | | Required skills: |
| | | - Clear concept of the whole project |
| | | - Design and modeling |
| | | Current skills: |
| | | - Languages: Objective-C, C, C#, JAVA |
| | | - iOS Development |
| TT : 1 T7 | Requirement Engineer, Life Cycle Planner | Required skills: |
| Haishan Ye | | - Project planning |
| | | - Progress controlling |
| | | - COCOMO II |
| | | - Clear communication skill |
| | | Current skills: |
| | | - Languages: Objective-C, Python |
| | | - iOS Development |
| W - : -: 71 | Franklika Frankrau Gartan Analikast | Required skills: |
| Kaiqi Zhang | Feasibility Engineer, System Architect | - UML |
| | | - System analysis |
| | | - Architecture design |
| | | - Feasibility and risk analysis |
| | | Required skills: |
| Alok Mitro | 117.8.77 | - Knowledge of testing |
| Alok Mitra | IIV&V | - Knowledge of technical debt |
| | | - Knowledge of project tracking metrics |

4 Approach

4.1 Monitoring and Control

- Bi-weekly Progress Report
- Bi-weekly Project Plan
- Weekly team meeting
- Weekly meeting with clients
- Bugzilla
- Commitment Review
- Git to manage the version of our project

4.1.1 Closed Loop Feedback Control

We have a weekly Team Meeting as well as a weekly meeting with client to discuss what we did and what we have to finish in the next week.

Also we use Basecamp, the widely used web-based project-management tool, to manage the project, create discussion so that we could share materials among all team member and clients as well as discuss questions we meet in the project at any place with others.

iMessage, group, WeiChat group and QQ group is built among team members to discuss, which helps a lot.

Bugzilla is used, team members report bugs and send it to assignee through Bugzilla.

4.1.2 Reviews

We have weekly meeting with clients to report what we have done and what need improving and changing.

Bi-weekly project plan and project report are ways to review.

Code review as we build the project.

Commitment review is held at each milestone.

4.2 Methods, Tools and Facilities

| Tools | Usage | Provider |
|----------|--|----------------|
| Xcode | Provides the platform to develop the project | Apple |
| iPhone | The platform to test the app | Team members |
| GitHub | Help in manage versions of the project | Open Source |
| Heroku | A server program testing service provider | Heroku |
| OmniPlan | The tool to make project plan | The Omni Group |
| MS World | Used to write documents | MS |

5 Resources

- Estimated CSCI577a Effort: 7 team members at 12 hrs/week for 12 weeks
- Total estimated effort 1008 hrs
- Budget information \$2000
- Project duration 12 weeks
- Component modules in your development project app for iPhone
- Programming language used Objective-C, html, Ruby

Table 6 Module lists and SLOC of each module

| No. | Module Name | Brief Description | SLOC | REVL |
|-----|-----------------------|--|------|------|
| 1 | Tumblr Share Module | Provide function to share videos on Tumblr | 150 | 2% |
| 2 | Facebook Share Module | Provide function to share videos on Facebook | 350 | 2% |
| 3 | Twitter Share Module | Provide function to share videos on Twitter | 180 | 1% |
| 4 | Friendship Module | To record relationship of users on LiveRiot | 400 | 1.5% |
| 5 | Account Module | The module of login, create account and so on | 200 | 0% |
| 6 | Featured videos lists | Providing a list of videos, which are tagged with features like "Top 10" | 400 | 2% |
| 7 | Video Tagging | Records users' tag of videos | 350 | 1% |

Table 7: COCOMOII Scale Driver

| Scale Driver | Value | Rationale |
|--------------|-------|--|
| PREC | LO | Since there is no such an app before, the precedent is low |
| FLEX | HI | Since the requirement could change sometimes, though |
| | | the schedule is relatively fixed according to the progress |
| | | of the arrangement. |
| RESL | LO | The architecture design is not clear enough since |
| | | requirement change over time |
| TEAM | HI | Communication is flexible and we cooperate well |
| PMAT | NOM | CMM Level = 2 |

Table 8: COCOMOII Cost Driver for Tumblr Share Module

| Cost Driver | Value | Rationale |
|--------------------|-------|--|
| RELY | NOM | The project is relatively reliable |
| DATA | NOM | $10 \leqslant D/P \leqslant 100$ |
| DOCU | NOM | Documents is based on our project |
| CPLX | NOM | The project is just like other popular app. |
| RUSE | NOM | We need to construct the component of Facebook and |
| | | Twitter |
| TIME | HI | If too slow, the app will lose customers. |
| STOR | NOM | The space of storage is part of the whole LiveRiot |
| | | system and it will be enough. |
| PVOL | NOM | No frequent great change to our platform |
| ACAP | NOM | We do not have such a experience though we will try |
| | | our best |
| PCAP | NOM | Some team members have the experience to develop app |
| | | on iPhone |
| PCON | HI | We will not change team members during the process of |
| | | the project |
| APEX | NOM | Some of the team members have the experience of |
| | | developing app on iPhone |
| LTEX | NOM | We have the experience of objective-C, HTML and |
| | | projects of other languages needed for this one. |
| PLEX | NOM | The platform is familiar to us |
| TOOL | NOM | The tools XCode and others are convenient. |
| SITE | HI | We communicate by e-mail and other tools, well our |
| | | client have to come school and take the meeting. |
| SCED | NOM | The schedule is relatively reasonable and it is little |
| | | possible for stretch-out or acceleration. |

Table 9 COCOMOII Cost Driver for Facebook Share Module

| Cost Driver | Value | Rationale |
|--------------------|-------|--|
| RELY | NOM | The project is relatively reliable |
| DATA | NOM | $10 \leqslant D/P \leqslant 100$ |
| DOCU | NOM | Documents is based on our project |
| CPLX | NOM | The project is just like other popular app. |
| RUSE | NOM | We need to construct the component of Facebook |
| TIME | HI | If too slow, the app will lose customers. |
| STOR | NOM | The space of storage is part of the whole LiveRiot |
| | | system and it will be enough. |
| PVOL | NOM | No frequent great change to our platform |

| ACAP | NOM | We do not have such a experience though we will try |
|------|-----|--|
| | | our best |
| PCAP | HI | Some team members have the experience to develop app |
| | | on iPhone |
| PCON | HI | We will not change team members during the process of |
| | | the project |
| APEX | HI | We have no experience of developing Facebook sharing |
| LTEX | NOM | We have the experience of objective-C and projects of |
| | | other languages needed for this one. |
| PLEX | NOM | The platform is familiar to us |
| TOOL | NOM | The tools XCode and others are convenient. |
| SITE | HI | We communicate by e-mail and other tools, well our |
| | | client have to come school and take the meeting. |
| SCED | NOM | The schedule is relatively reasonable and it is little |
| | | possible for stretch-out or acceleration. |

Table 10 COCOMOII Cost Driver for Twitter Share Module

| Cost Driver | Value | Rationale |
|--------------------|-------|---|
| RELY | NOM | The project is relatively reliable |
| DATA | NOM | $10 \leqslant D/P \leqslant 100$ |
| DOCU | NOM | Documents is based on our project |
| CPLX | NOM | The project is just like other popular app. |
| RUSE | NOM | We need to construct the component of Facebook and Twitter |
| TIME | HI | If too slow, the app will lose customers. |
| STOR | NOM | The space of storage is part of the whole LiveRiot system and it will be enough. |
| PVOL | NOM | No frequent great change to our platform |
| ACAP | NOM | We do not have such a experience though we will try our best |
| PCAP | HI | Some team members have the experience to develop app on iPhone |
| PCON | HI | We will not change team members during the process of the project |
| APEX | NOM | The development of Twitter share is relatively |
| LTEX | NOM | We have the experience of objective-C, HTML and projects of other languages needed for this one. |
| PLEX | NOM | The platform is familiar to us |
| TOOL | NOM | The tools XCode and others are convenient. |
| SITE | HI | We communicate by e-mail and other tools, well our client have to come school and take the meeting. |
| SCED | NOM | The schedule is relatively reasonable and it is little possible for stretch-out or acceleration. |

Table 11 COCOMOII Cost Driver for Friendship Module

| Cost Driver | Value | Rationale |
|-------------|-------|--|
| RELY | NOM | The project is relatively reliable |
| DATA | NOM | $10 \leqslant D/P \leqslant 100$ |
| DOCU | NOM | Documents is based on our project |
| CPLX | NOM | The module is common in usual projects. |
| RUSE | NOM | We need to construct the component of Facebook and |
| | | Twitter |
| TIME | HI | If too slow, the app will lose customers. |
| STOR | NOM | The space of storage is part of the whole LiveRiot |
| | | system and it will be enough. |
| PVOL | NOM | No frequent great change to our platform |
| ACAP | NOM | We do not have such a experience though we will try |
| | | our best |
| PCAP | HI | Some team members have the experience to develop app |
| | | on iPhone |
| PCON | HI | We will not change team members during the process of |
| | | the project |
| APEX | NOM | Some of the team members have the experience of |
| | | developing app on iPhone |
| LTEX | NOM | We have the experience of objective-C, HTML and |
| | | projects of other languages needed for this one. |
| PLEX | NOM | The platform is familiar to us |
| TOOL | NOM | The tools XCode and others are convenient. |
| SITE | HI | We communicate by e-mail and other tools, well our |
| | | client have to come school and take the meeting. |
| SCED | NOM | The schedule is relatively reasonable and it is little |
| | | possible for stretch-out or acceleration. |

Table 12 COCOMOII Cost Driver for Account Module

| Cost Driver | Value | Rationale |
|--------------------|-------|--|
| RELY | NOM | The project is relatively reliable |
| DATA | NOM | $10 \leqslant D/P \leqslant 100$ |
| DOCU | NOM | Documents is based on our project |
| CPLX | NOM | The module is common in projects. |
| RUSE | NOM | We need to construct the component of Facebook and |
| | | Twitter |
| TIME | HI | If too slow, the app will lose customers. |
| STOR | NOM | The space of storage is part of the whole LiveRiot |
| | | system and it will be enough. |

| PVOL | NOM | No frequent great change to our platform |
|------|-----|--|
| ACAP | NOM | We do not have such a experience though we will try |
| | | our best |
| PCAP | HI | Some team members have the experience to develop app on iPhone |
| PCON | HI | We will not change team members during the process of the project |
| APEX | NOM | Some of the team members have the experience of developing app on iPhone |
| LTEX | NOM | We have the experience of objective-C, HTML and projects of other languages needed for this one. |
| PLEX | NOM | The platform is familiar to us |
| TOOL | NOM | The tools XCode and others are convenient. |
| SITE | HI | We communicate by e-mail and other tools, well our |
| | | client have to come school and take the meeting. |
| SCED | NOM | The schedule is relatively reasonable and it is little |
| | | possible for stretch-out or acceleration. |

Table 13 COCOMOII Cost Driver for Video Tagging

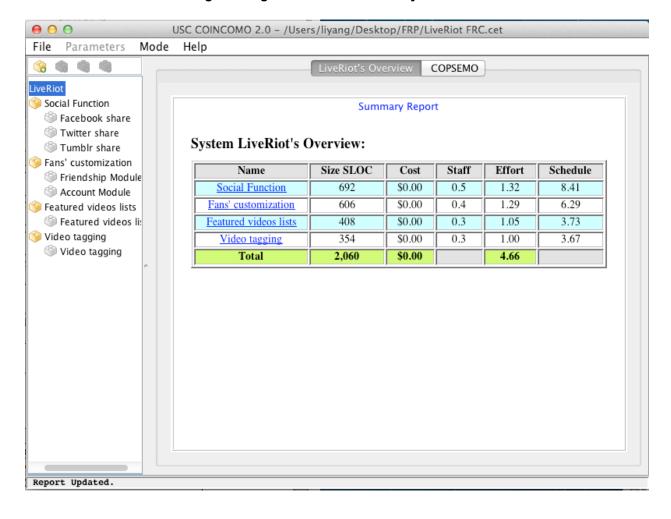
| Cost Driver | Value | Rationale |
|-------------|-------|--|
| RELY | NOM | The project is relatively reliable |
| DATA | NOM | $10 \leqslant D/P \leqslant 100$ |
| DOCU | NOM | Documents is based on our project |
| CPLX | NOM | The module is common in projects. |
| RUSE | NOM | We need to construct the component of Facebook and Twitter |
| TIME | HI | If too slow, the app will lose customers. |
| STOR | NOM | The space of storage is part of the whole LiveRiot system and it will be enough. |
| PVOL | NOM | No frequent great change to our platform |
| ACAP | NOM | We do not have such a experience though we will try our best |
| PCAP | LO | We have not such a experience |
| PCON | HI | We will not change team members during the process of the project |
| APEX | NOM | Some of the team members have the experience of developing app on iPhone |
| LTEX | NOM | We have the experience of objective-C, HTML and projects of other languages needed for this one. |
| PLEX | NOM | The platform is familiar to us |
| TOOL | NOM | The tools XCode and others are convenient. |
| SITE | HI | We communicate by e-mail and other tools, well our |

| | | client have to come school and take the meeting. | |
|------|--|--|--|
| SCED | NOM The schedule is relatively reasonable and it is little | | |
| | | possible for stretch-out or acceleration. | |

Table 14 COCOMOII CostDriver for Feature Video List

| Cost Driver | Value | Rationale | | |
|-------------|-------|---|--|--|
| RELY | NOM | The project is relatively reliable | | |
| DATA | NOM | $10 \leqslant D/P \leqslant 100$ | | |
| DOCU | NOM | Documents is based on our project | | |
| CPLX | NOM | The module is common in projects. | | |
| RUSE | NOM | We need to construct the component of Facebook and Twitter | | |
| TIME | HI | If too slow, the app will lose customers. | | |
| STOR | NOM | The space of storage is part of the whole LiveRiot system and it will be enough. | | |
| PVOL | NOM | No frequent great change to our platform | | |
| ACAP | NOM | We do not have such a experience though we will try our best | | |
| PCAP | LO | We have not such an experience | | |
| PCON | HI | We will not change team members during the process of the project | | |
| APEX | NOM | Some of the team members have the experience of developing app on iPhone | | |
| LTEX | NOM | We have the experience of objective-C, HTML and projects of other languages needed for this one. | | |
| PLEX | NOM | The platform is familiar to us | | |
| TOOL | NOM | The tools Xcode and others are convenient. | | |
| SITE | HI | We communicate by e-mail and other tools, well our client have to come school and take the meeting. | | |
| SCED | NOM | The schedule is relatively reasonable and it is little possible for stretch-out or acceleration. | | |

Figure 1 Figure of COCOMOII Analysis Result



6 Iteration Plan

6.1 Plan

Our first iteration focuses on constructing the app on iOS 7 and implementing the Facebook share module, Twitter share module and Tumblr share module. This module will provide the function to share videos from LiveRiot app to other SNS platform such as Facebook, Twitter and Tumblr.

In this iteration, we will record our work and plan in DC package.

6.1.1 Capabilities to be implemented

The follows are capabilities we will implement in the upcoming iteration.

Table 15 Construction iteration capabilities to be implemented

| ID | Capability | Description | Priority | Iteration |
|----|-------------------|--|----------|-----------|
| 1 | Share by Facebook | Use Facebook SDK to implement the | 1(HIGH) | 1 |
| | SDK | function that users could share video on | | |
| | | Facebook | | |
| 2 | Share on Twitter | Implement the function to share videos | 1(HIGH) | 1 |
| | | on Twitter | | |
| 3 | Share on Tumblr | Users can also share videos on Tumblr | 1(HIGH) | 1 |
| 4 | Share by Social | Users could also share on SNS by iOS | 1(HIGH) | 1 |
| | Framework | social framework | | |

6.1.2 Capability to be tested

We plan to test the capabilities through the following process.

Table 16 Construction iteration capabilities to be tested

| ID | Capability | Description | Priority | Iteration |
|----|-------------------|--|----------|-----------|
| 1 | Share on Facebook | Click on Facebook share button and then | 1(HIGH) | 1 |
| | | login after you fill your Facebook | | |
| | | account or with the default one to share | | |
| | | the video so that it can be view directly | | |
| | | on Facebook | | |
| 2 | Share on Twitter | Click on Twitter share button and then | 1(HIGH) | 1 |
| | | login after you fill your Twitter account | | |
| | | or with the default one to share the video | | |
| | | on Twitter | | |
| 3 | Share on Tumblr | Click on Tumblr share button and then | 1(HIGH) | 1 |

| | | login after you fill your Tumblr account or with the default one to share the video on Tumblr | | |
|---|------------------------------|---|--------|---|
| 4 | Login with Facebook Account | Users could login with their Facebook account. If so, this account will be the default account when they share video on Facebook. | 2(MED) | 2 |
| 5 | Login with Twitter Account | Users could login with their Twitter account. If so, this account will be the default account when they share video on Twitter. | 2(MED) | 2 |
| 6 | Login with Tumblr Account | Users could login with their Tumblr account. If so, this account will be the default account when they share video on Tumblr. | 2(MED) | 2 |

6.1.3 Capabilities not to be tested

There is no capability we won't test.

6.1.4 CCD Preparation Plans

We will invite clients and other users to take part in the Core Capability Drive-through.

The team will show users how the app work and each function features that may be implemented and ask about their opinions. The most important part of these functions would be the social sharing. We will show them how users can share videos from LiveRiot app to other SNS with comments.

The purpose of CCD is to make sure our current process is on the right way and our clients are satisfied with what we have developed. Also if there is some drawback, we could get the feedback from clients as soon as possible.

To test the current system, we would ask clients for administration on the Website of LiveRiot so that we can get source url of videos from the website. This will be used with our accounts of other SNS as test data of the app.

The following table is the Feedback Form we should get from clients after this CCD:

| ID | Suggestion | Rate |
|----|------------------------------|-------------------------------|
| | | (Satisfied) 1-5 (not so good) |
| 1 | Good in all, most functions | 1 |
| | have been implemented very | |
| | well. Need to fix two little | |
| | problems. | |

6.2 Iteration Assessment

6.2.1 Capabilities Implemented, Tested, and Results

| ID | Capability | Test Case | Test Results | If fail, why? |
|----|-----------------------------|-----------|--------------|---------------|
| | Users can successfully | TC-01-01, | | |
| 1 | login with validate | TC-01-02, | Pass | |
| | Facebook account | TC-01-03 | | |
| | If user input wrong | TC-01-01, | | |
| 2 | Facebook ID or password, | TC-01-02, | Pass | |
| | they cannot login | TC-01-03 | | |
| | Users can successfully | TC-01-04 | | |
| 3 | login with validate Twitter | | Pass | |
| | account | | | |
| | If user input wrong Twitter | TC-01-04, | | |
| 4 | ID or password, they | | Pass | |
| | cannot login | | | |
| | Users can successfully | TC-01-05 | | |
| 5 | login with validate Tumblr | | Pass | |
| | account | | | |
| | If user input wrong Tumblr | TC-01-05 | | |
| 6 | ID or password, they | | Pass | |
| | cannot login | | | |
| 7 | Share on Facebook | TC-02-01 | Pass | |
| 8 | Share on Twitter | TC-02-02 | Pass | |
| 9 | Share on Tumblr | TC-02-03 | Pass | |

6.3 Adherence to Plan

Team 04 has been following the iteration plan and completed all proposed capabilities on time except some delay caused by followings in the past semester:

- At the beginning of our work, we cannot get in contact with our client in the first client interaction session.
- We wait a comparably long time to get the URL of videos on LiveRiot.
- Tagged module, which we plan to implement, was not really developed because we do not know relative information and our client only asked us to implement the share module.