Lovestep
Jam Right Now

The Team
Joseph Hernandez – Team Manager
George Kennedy – Design
Scott Buckstaff – User testing, documentation
Igor Berman – Development

Problem and Solution Overview
Music collaboration is easy: just get a couple instruments, sit in a circle, and jam. But what if you only have your phones? Despite the great advances both in Electronic music marking and in Mobile technology, to date there’s no platform for collaboratively creating music using only mobile devices. Enter Lovestep - an intuitive, yet powerful, App, that allows users to record, mix and share their tunes in real time, giving them the feeling of an actual jam session.

UI Exploration and choice
We’ve explored two “high level” UI designs, differing in how they represent each recorded sound bite. The original design showed them as a waveforms with an associated number of beats, while the second design showed each loop as an actual circle or semi-circle, depending on its length compared to the longest segment.

Eventually, we preferred the second design – the wavelets didn’t provide any useful information and tended to clutter the screen, while the colored loops could be layered, to serve as clear visual clues about the length and instrument of each circle.

Furthermore, by adding a pointer that circled the display during replay, the application shows the user what segment is being played and how fast. It’s functionality is shown in the following table:

<table>
<thead>
<tr>
<th>Function</th>
<th>Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show all segments that make up a track</td>
<td>A layered display of concentric circles, with a colored “legend” below</td>
</tr>
<tr>
<td>Illustrate the different length of each segment</td>
<td>The segments are all compared against the longest one. In the above example, the blue piano1 segment is 4 times as long as the bass1 segment and 2 times as long as drum1.</td>
</tr>
<tr>
<td>Record new loops</td>
<td>Done using a step sequencer, shown below “UI storyboard”</td>
</tr>
<tr>
<td>Play the recorded track</td>
<td>The pointer (orange) circles the layered display during playing and help visualize what segments are playing every moment</td>
</tr>
</tbody>
</table>
Share loops with friends | Done with an intuitive swiping interface, shown in the video

**Main Use Scenarios:**

**Basic:** User record a single loop using a step sequencer:

**Advanced:** User mixes two loops from different instruments:

**Master:** Three users collaborating to creating a single track.
Concept Video Storyboard

**Scene 1: Studying**

(Playing Music)

Hey, what's that?

That's our... music.

That's cool, I wish we could play together.

We can just download...

(playing)

(studying)

(studying)

**Scene 2**

Record Piano Loop

Record 2nd Piano Loop

Record Drums

Record Bass

Mix it all together

Everybody playing and bobbing heads ———
Concept Video Description

We wanted our video to highlight exactly how easy it is to learn and enjoy Lovestep. Our idea was to show a relatable scene in which target users discover the application and make good collaborative music. Special attention was paid to creating a song that both sounds good and could realistically be made with the Lovestep application.

Planning: The design process of the video began with an initial 2 hour meeting in which we discussed exactly what concepts we wanted our video to illustrate. After coming to an agreement, we then created a rough initial storyboard.

Music: We needed a good “Lovestep” song for the video, and thanks to George’s superb and speedy musical production skills, that stage of the process only took two hours.

Filming: Shooting the video took two and a half hours. Multiple takes were necessary before we came to shots we were satisfied with, and setting up simple shots took more time than expected.

Editing: Editing took four hours. Splicing video clips was fairly simple, but further postproduction was a bit more complicated.

Difficulties
We had trouble actually shooting the video. None of us are very good actors, and it took us multiple tries to even get our very simple lines out. We also took a good bit of time rearranging the angles of the shots until we found something that we thought was interesting enough. Postproduction involved some tricky synchronization of audio because the camera did not have a microphone.

Successes
Despite our difficulties, we are all very happy with how the final product turned out. Our team worked together well, and we are especially proud of the Lovestep song.