Marketing Video Tool - Replit Vibe Coder Implementation Instructions

⚠️ CRITICAL: READ BEFORE ANY VIDEO GENERATION

This tool MUST NOT generate videos randomly or without structure.
Every video MUST follow the Script Generation Framework and pass all quality gates before output.

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1. MANDATORY WORKFLOW (No Exceptions)

USER REQUEST → SCRIPT VALIDATION → ASSET GATHERING → VIDEO ASSEMBLY → QUALITY CHECK → OUTPUT

NEVER skip directly to video generation. ALWAYS start with script validation.

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2. Available Integrations & Their Roles

Integration	Purpose	When to Use
Anthropic (Claude)	Script generation, narrative structure	FIRST STEP - Always generate/validate script before any video work
Hugging Face	AI content generation, summarization (FLAN-T5)	Text processing, content enhancement
ElevenLabs	Professional voiceover generation	AFTER script is finalized and approved
Unsplash Premium	Medical/industrial imagery	Asset gathering phase only
Lottie	Professional animations/transitions	Video assembly phase
Runway	Video generation (Gen-3)	Video assembly phase

Integration	Purpose	When to Use
Stable Diffusion	Image/video generation	Asset creation, B-roll generation

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3. SCRIPT GENERATION FRAMEWORK (MANDATORY)

Every video script MUST contain these 5 components IN ORDER:

```javascript
```

```
const SCRIPT_FRAMEWORK = {
  1: {
    name: "HOOK",
    duration: "3-5 seconds",
    purpose: "Attention-grabbing opening with emotional resonance",
    requirements: [
      "Must address viewer directly OR pose compelling question",
      "Must create immediate curiosity or emotional connection",
      "Must relate to target audience's primary concern"
    ],
    validation: (hook) => hook.length > 0 && hook.length <= 50 // words
  },

  2: {
    name: "PROBLEM_IDENTIFICATION",
    duration: "5-10 seconds",
    purpose: "Clear pain point articulation",
    requirements: [
      "Must state specific problem target audience faces",
      "Must use language audience would use themselves",
      "Must create recognition ('that's me!')"
    ],
    validation: (problem) => problem.includes_pain_point && problem.is_specific
  },

  3: {
    name: "SOLUTION_PRESENTATION",
    duration: "10-20 seconds",
    purpose: "Product/service value proposition",
    requirements: [
      "Must clearly state what the solution is",
      "Must explain HOW it solves the problem",
      "Must list 2-3 specific benefits (not features)"
```

```
    ],
    validation: (solution) => solution.benefits.length >= 2
  },

  4: {
    name: "SOCIAL_PROOF",
    duration: "5-10 seconds",
    purpose: "Credibility establishment",
    requirements: [
      "Must include at least ONE of: testimonial, statistic, authority marker",
      "Must be specific (numbers, names, outcomes)",
      "Must be verifiable or attributable"
    ],
    validation: (proof) => proof.has_specific_claim
  },

  5: {
    name: "CALL_TO_ACTION",
    duration: "3-5 seconds",
    purpose: "Specific next steps",
    requirements: [
      "Must state EXACTLY what viewer should do",
      "Must include urgency element (why now)",
      "Must be single, clear action (not multiple options)"
    ],
    validation: (cta) => cta.action_verb && cta.urgency_element
  }
};
```

Script Generation Function (USE THIS):

```
javascript
```

```
async function generateMarketingScript(userRequest) {
  // STEP 1: Extract marketing context
  const context = await analyzeRequest(userRequest);

  // STEP 2: Generate structured script using Claude
  const scriptPrompt = `
    Generate a marketing video script following this EXACT structure:

    TARGET AUDIENCE: ${context.audience}
    PRODUCT/SERVICE: ${context.product}
    VIDEO LENGTH: ${context.duration}
    PLATFORM: ${context.platform}

    REQUIRED SECTIONS (include ALL):

    ## HOOK (3-5 seconds)
    [Write attention-grabbing opening]

    ## PROBLEM (5-10 seconds)
    [Identify specific pain point]

    ## SOLUTION (10-20 seconds)
    [Present value proposition with 2-3 benefits]

    ## SOCIAL PROOF (5-10 seconds)
    [Include testimonial, statistic, or authority marker]

    ## CALL TO ACTION (3-5 seconds)
    [Specific action + urgency]

    For each section, also provide:
    - Visual direction (what should be on screen)
    - Audio notes (voiceover tone, music mood)
```

```
  - Timing in seconds
`;

const script = await anthropicAPI.complete(scriptPrompt);

// STEP 3: Validate script has all sections
const validation = validateScript(script);
if (!validation.passed) {
  throw new Error(`Script missing required sections: ${validation.missing.join(', ')}`);
}

return script;
}
```

---

4. VIDEO PRODUCTION PIPELINE (ENFORCE THIS ORDER)

javascript

```
async function produceVideo(approvedScript) {
  // ========================================
  // PHASE 1: SCRIPT PROCESSING
  // ========================================
  const parsedScript = parseScriptSections(approvedScript);

  // Validate structure
  if (!parsedScript.hook || !parsedScript.problem || !parsedScript.solution ||
      !parsedScript.socialProof || !parsedScript.callToAction) {
    throw new Error("BLOCKED: Script does not follow required framework");
  }

  // ========================================
  // PHASE 2: ASSET GATHERING
  // ========================================
  const assets = {
    images: [],
    animations: [],
    audioTracks: []
  };

  // Gather images based on script visual directions
  for (const section of parsedScript.sections) {
    if (section.visualDirection.requiresImage) {
      const image = await unsplashPremium.search({
        query: section.visualDirection.imageQuery,
        orientation: getOrientationForPlatform(parsedScript.platform)
      });
      assets.images.push({ section: section.name, image });
    }
  }

  // Generate voiceover AFTER script is complete
```

```
const voiceover = await elevenLabs.generateVoiceover({
  text: parsedScript.fullNarration,
  voice: parsedScript.brandVoice || "professional",
  emotionalTone: parsedScript.tone || "confident"
});
assets.audioTracks.push(voiceover);

// ========================================
// PHASE 3: VIDEO ASSEMBLY
// ========================================
const videoConfig = {
  platform: parsedScript.platform,
  aspectRatio: getAspectRatio(parsedScript.platform),
  sections: []
};

// Build each section with proper timing
for (const section of parsedScript.sections) {
  const videoSection = await assembleSection({
    script: section,
    assets: assets.images.filter(a => a.section === section.name),
    voiceoverSegment: extractVoiceoverSegment(voiceover, section.timing),
    transitions: getLottieTransition(section.transitionType)
  });
  videoConfig.sections.push(videoSection);
}

// ========================================
// PHASE 4: AUDIO INTEGRATION
// ========================================
const syncedVideo = await syncAudioToVideo({
  videoSections: videoConfig.sections,
  voiceover: voiceover,
```

```
    backgroundMusic: await selectBackgroundMusic(parsedScript.mood)
  });

  // ========================================
  // PHASE 5: QUALITY REVIEW (MANDATORY)
  // ========================================
  const qualityCheck = await runQualityChecks(syncedVideo);

  if (!qualityCheck.passed) {
    console.error("QUALITY CHECK FAILED:", qualityCheck.failures);
    // Return to appropriate phase for fixes
    return { success: false, failures: qualityCheck.failures };
  }

  return { success: true, video: syncedVideo };
}
```

---

5. QUALITY ASSURANCE CHECKS (ALL MUST PASS)

javascript

```
const QUALITY_CHECKS = {
  timing: {
    name: "Timing Validation",
    check: (video) => {
      const totalDuration = video.sections.reduce((sum, s) => sum + s.duration, 0);
      const targetDuration = video.targetDuration;
      const tolerance = 0.1; // 10% tolerance
      return Math.abs(totalDuration - targetDuration) / targetDuration <= tolerance;
    },
    failureAction: "Adjust section durations to meet target"
  },

  brandCompliance: {
    name: "Brand Compliance",
    check: (video) => {
      return video.usesApprovedColors &&
             video.usesApprovedFonts &&
             video.logoPlacementCorrect;
    },
    failureAction: "Update visual elements to match brand guidelines"
  },

  messagingAlignment: {
    name: "Strategic Messaging",
    check: (video) => {
      return video.hasAllScriptSections &&
             video.ctaIsClear &&
             video.valuePropositionPresent;
    },
    failureAction: "Script does not serve marketing objectives - regenerate"
  },

  audioClarity: {
```

```
    name: "Audio Quality",
    check: (video) => {
      return video.voiceoverAudible &&
             video.musicNotOverpowering &&
             video.noAudioClipping;
    },
    failureAction: "Adjust audio levels and regenerate"
  },

  platformCompliance: {
    name: "Platform Requirements",
    check: (video) => {
      const specs = PLATFORM_SPECS[video.platform];
      return video.aspectRatio === specs.aspectRatio &&
             video.duration <= specs.maxDuration &&
             video.fileSize <= specs.maxFileSize;
    },
    failureAction: "Adjust video specifications for target platform"
  }
};

async function runQualityChecks(video) {
  const results = { passed: true, failures: [] };

  for (const [key, check] of Object.entries(QUALITY_CHECKS)) {
    const passed = await check.check(video);
    if (!passed) {
      results.passed = false;
      results.failures.push({
        check: check.name,
        action: check.failureAction
      });
    }
```

```
  }

  return results;
}
```

---

6. OUTPUT FORMAT SPECIFICATIONS

javascript

```
const PLATFORM_SPECS = {
  youtube: {
    aspectRatio: "16:9",
    resolution: "1920x1080",
    maxDuration: 600, // 10 minutes
    maxFileSize: "256MB",
    format: "MP4"
  },
  tiktok: {
    aspectRatio: "9:16",
    resolution: "1080x1920",
    maxDuration: 180, // 3 minutes
    maxFileSize: "287MB",
    format: "MP4"
  },
  instagram_reels: {
    aspectRatio: "9:16",
    resolution: "1080x1920",
    maxDuration: 90,
    maxFileSize: "250MB",
    format: "MP4"
  },
  instagram_feed: {
    aspectRatio: "1:1",
    resolution: "1080x1080",
    maxDuration: 60,
    maxFileSize: "250MB",
    format: "MP4"
  },
  linkedin: {
    aspectRatio: "16:9",
    resolution: "1920x1080",
    maxDuration: 600,
```

```
    maxFileSize: "200MB",
    format: "MP4"
  }
};
```

---

7. ERROR HANDLING & FALLBACKS

javascript

```
const ERROR_HANDLING = {
  // If primary integration fails, use fallback
  fallbacks: {
    voiceover: {
      primary: "ElevenLabs",
      fallback: "Whisper + local TTS",
      action: "Log failure, use fallback, alert user"
    },
    videoGeneration: {
      primary: "Runway Gen-3",
      fallback: "Stable Diffusion Video",
      action: "Attempt fallback, reduce quality if needed"
    },
    imageSearch: {
      primary: "Unsplash Premium",
      fallback: "Stable Diffusion image generation",
      action: "Generate custom image if stock not available"
    }
  },

  // Rate limiting protection
  rateLimiting: {
    maxRequestsPerMinute: {
      anthropic: 10,
      elevenLabs: 5,
      runway: 3
    },
    action: "Queue requests, implement exponential backoff"
  },

  // Graceful degradation
  degradation: {
    onPartialFailure: "Complete video with available assets, flag missing elements",
```

```
    onCriticalFailure: "Return partial script with manual completion instructions"
  }
};
```

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8. USAGE EXAMPLES

Example 1: Product Launch Video

javascript

```
// User request
const request = {
  type: "product_launch",
  product: "New fitness tracker with sleep monitoring",
  audience: "Health-conscious professionals aged 30-45",
  platform: "instagram_reels",
  duration: 60,
  tone: "energetic but professional"
};

// System should generate:
const expectedOutput = {
  script: {
    hook: "Still waking up tired despite 8 hours in bed?",
    problem: "Your sleep quality matters more than quantity. Most trackers just count hours—they miss what's really h
    solution: "FitTrack Pro monitors your actual sleep cycles, identifies disruptions, and gives you actionable insights.
    socialProof: "87% of users report better energy within 2 weeks.",
    callToAction: "Tap to claim your 30% launch discount—ends Sunday."
  },
  visuals: [/* structured visual directions */],
  timing: [/* second-by-second breakdown */],
  voiceoverSpec: {/* ElevenLabs parameters */}
};
```

Example 2: Testimonial Video

javascript

```
const request = {
  type: "testimonial",
  product: "B2B software solution",
  testimonialSource: "provided customer quote",
  platform: "linkedin",
  duration: 90
};

// System enforces structure even with testimonial content
const expectedOutput = {
  script: {
    hook: "How one company cut reporting time by 70%",
    problem: "Manual reporting was eating 15 hours of their week",
    solution: "[Product] automated their entire workflow",
    socialProof: "[Customer testimonial with specific metrics]",
    callToAction: "See how it works for your team—book a demo"
  }
};
```

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9. IMPLEMENTATION CHECKLIST

Before considering the video tool complete, verify:

- [ ] Script generation ALWAYS follows 5-part framework
- [ ] No video is generated without validated script
- [ ] All integrations are called in correct pipeline order
- [ ] Quality checks run on EVERY output
- [ ] Platform specifications are enforced
- [ ] Error handling gracefully degrades
- [ ] User receives structured output (not random content)
- [ ] Every video serves stated marketing objective

10. ANTI-PATTERNS TO AVOID

❌ **DO NOT:**

- Generate video content before script is validated
- Skip any of the 5 script sections
- Output video without running quality checks
- Use random imagery not tied to script direction
- Generate voiceover before script is finalized
- Ignore platform specifications
- Produce "creative" content that ignores the framework

✅ **ALWAYS:**

- Start with script generation via Claude/Anthropic
- Validate all 5 sections are present
- Match assets to script visual directions
- Run full quality check pipeline
- Output structured, measurable content

SUMMARY: The Golden Rule

> **Every video must answer: "What marketing objective does this serve?"**
> If you cannot clearly articulate the objective, the hook, the problem, the solution, the proof, and the action—**DO NOT GENERATE THE VIDEO.**

This tool exists to create strategic marketing content, not random videos. Enforce the framework without exception.